The OIL WEEKLY

10¢ A COPY

November 5, 1926 Volume 43. No. 7

It's a Wilson

Drill Against Pressure—with Safety!

WILSON & WILLARD CIRCULATING HEAD

With this Head you can continue to drill while holding down heavy gas pressures.

The top plate is removable so that tools can be brought out or put in the hole, the same as where an ordinary drilling nipple is used.

If gas is struck and deeper drilling is desired one of these Heads can be screwed into the casing and the gas taken outside through lead lines. Thus the Crew is free from dangerous gas fumes.

Use this Head on every standard drilled well. Carried in stock by leading supply houses.

Wilson Oil Tools Corp.
DISTRIBUTORS FOR
Wilson & Willard Mfg. Co.

Factory and Distributor's Office — It's a Wilson — 2301 East Vernon Ave
Los Angeles, Calif.

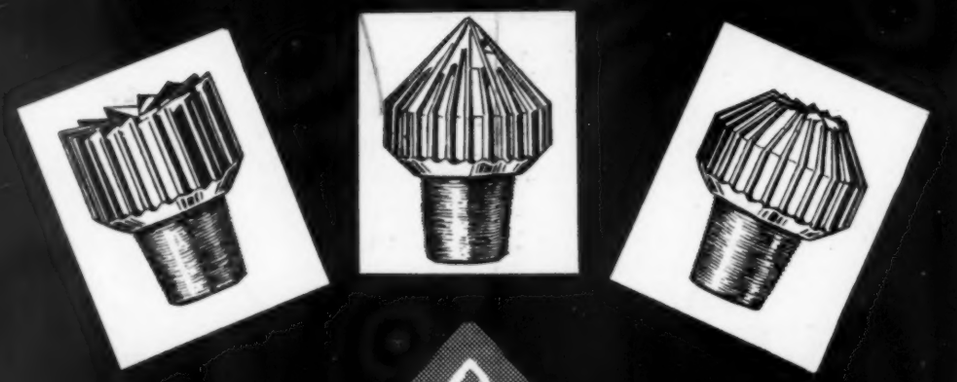
TULSA, OKLA., 409 Atlas Life Bldg.
HOUSTON, TEXAS, 530 West Bldg.
AMARILLO, TEXAS, 1501 Polk

REED ROTARY DRILLING TOOLS
SPEED - ECONOMY - DURABILITY

The quality of

Reed Milling Tools

is not left to luck. From the raw materials to the finished product, every step is safe-guarded—that there may be no failures in the field.



Reed Roller Bit Company

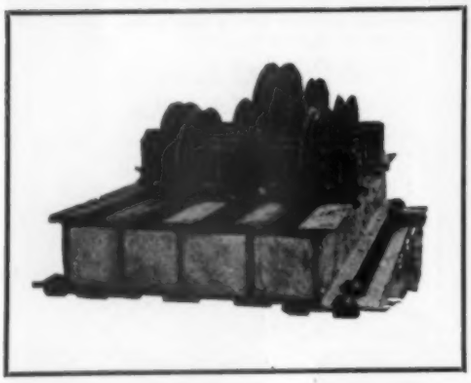
HOUSTON LOS ANGELES

The OIL WEEKLY. Issued weekly by the Gulf Publishing Co., 1716 Dallas Ave., Houston, Texas. Subscription price $1.00 per year; 10 cents per copy. Entered as second-class mail matter December 23, 1916, at the post office at Houston, Texas, under act of March 3, 1879.

SERVICE
SERVICE, always important, becomes doubly important when urgently needed. It is then that our location, in the heart of the oil industry, performs its most important function.
Pumps and parts sent from Tulsa are on the job and working by the time shipments from other points are fairly under way.
Combine this advantage with Gaso quality and you have a simple explanation of Gaso leadership.
GASO PUMP & BURNER MFG. CO. •• Tulsa, Okla.
Few pumps in the Gaso line have enjoyed such instantaneous success as the new Gaso Portable Pumping Unit: a heavy duty worm driven, self-lubricating pump, mounted on a standard tread wooden wheel truck with cushion tires, Can be transported anywhere for regular or emergency service. Provides genuine pump insurance.
New Gaso Portable Pumping Unit.
GASO PUMPS

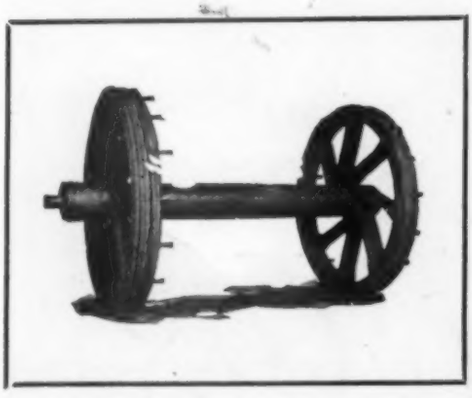
Say you saw it in The OIL WEEKLY

The Dividing Line



"Well, Boy! What do you think of your 5000-barrel well?" "She's a beaut, Gus. I'll hand it to you for speedy drilling and good luck."

"Good Luck? Luck had nothing to do with it. Look the rig over—a complete 'IDECO' Steel Derrick with 'IDECO' Crown Blocks, Steel Wheels and Machinery Supports—add to this good pipe and tools. Luck has nothing to do with it."



"Look over at Williams' wreck—see what happens when a wooden rig tries to race with an 'IDECO'! Williams is a fine fellow, but he hasn't learned you can't drill a 1926 hole with an 1896 model derrick."

The International Derrick

Columbus, Ohio

Dallas	Denver	Tonkawa
Casper	Bakersfield	Amarillo
Eldorado, Kans.	Wichita Falls	Seminole
	Drumright	Okemah

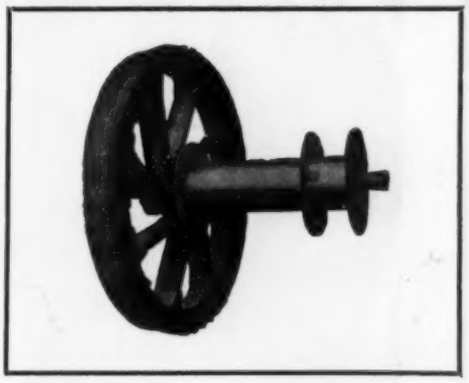
California Representative:
EXPORT
Columbus, Ohio 30 Church St., New York

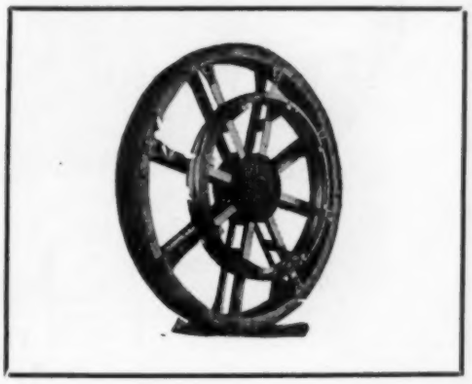
The largest company devoted exclusively equipment for the oil,

Between Profit and Loss

"Up to an hour ago, chief, I would of said wooden derricks were all right, but **after this** tough piece of luck I'm through. Gus Edwards was beating me ten feet a day with 'IDECO' steel outfit of his before we pulled her in. Now he's on production and draining the pool.

"I'm through now with wood! Get me an 'IDECO' and I'll be down to sand in a week without countin' on good luck."





& Equipment Company

Torrance, California

Tulsa	Wewoka	Houston
Oil City	Corsicana	Smackover
Los Angeles	New York	Mexia
Panhandle	Shreveport	

National Supply Co. of Calif.

Representation:

Los Angeles San Francisco Houston

to the manufacture of steel (Galvanized) gas and artesian industries.

Lorraine Built Sucker Rod Rack On Top!

On top in performance—on top when in work; easy to get at yet as safe as a church. It holds sixty stands of sucker rods, in perfect formation, aloft and out of the way. This naturally allows for much faster work in pulling out or running in. Beyond a doubt, this is the

Fastest, Safest Way Known For Handling Sucker Rods

The Lorraine Built Rod Rack is provided with a hanger which is hooked onto the rod, releasing the elevator immediately it reaches the top with a stand. While the elevator goes down for another stand, the derrick man slides the first stand in the rack, removes the hanger and is ready for the next. This is a simple, safe and efficient way of handling all sucker rods. It actually pays for itself in a single job on the savings it affects on damaged rods.

SEE THEM IN OPERATION

You will say as others say: "It works like a charm."

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Arkansas Branch:
Crowell Bros.,
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El Dorado, Arkansas

Export Distributors:
Buck & Stoddard,
25 Broadway,
New York City

Say you saw it in The OIL WEEKLY

The "Standardized" Oil Field Bearing Improves Winches and Hoists

HOPPER MACHINE WORKS
OIL WELL TOOLS

May 18, 1926.

American Roller Bearing Company,
416 Belmont Avenue,
Pittsburgh, Penna.

Attn. Mr. C. P. Sweep.

Dear Mr. Sweep:-

We are mailing you today photographs of our Type "C" Hoist. These hoists are all equipped with American Heavy Duty Type "C" Roller Bearings.

It has been generally believed that deep wells can be pumped on a multiple power plant the same as shallow wells. In fact, the falling production in the Los Angeles fields makes a cheaper method of production imperative, but after placing the deep wells on the multiple power the drawing of tubing and bailing of sand from these deep wells had not been solved until we put out this super portable hoist which was especially designed for this purpose.

This machine is mounted to a Caterpillar 60 and is capable of lifting 40,000 pounds with two lines. The drum has six speeds forward and two reverse, and is equipped with massive double brakes and clutches. This machine is giving perfect satisfaction and has proved to be a great boon.

We manufacture the smaller machines for shallower wells.

One of the greatest obstacles in designing these machines was in the use of proper bearings. This was solved for us, as you know, by the engineering department of American Roller Bearing Company. American Roller Bearings are now used throughout these machines. They are giving the highest efficiency we have ever obtained by eliminating all bearing troubles and giving a snappy return to the drum which is absolutely necessary for hoisting.

Yours very truly,
Hopper Machine Corp.
H. A. Hopper

HAH/P

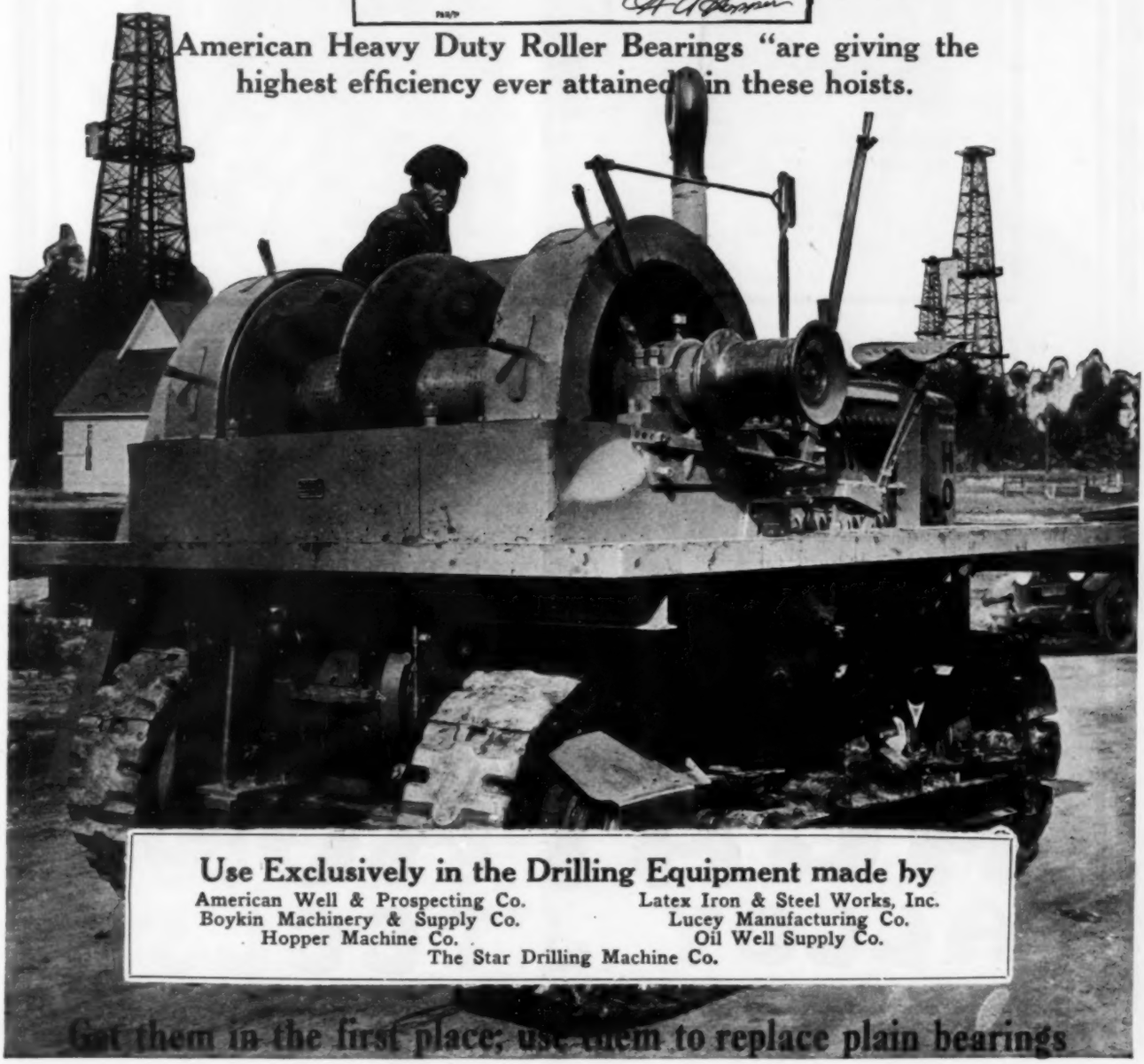
Just as they improve Traveling and Crown Blocks and Reverse Clutches

LARGEST MANUFACTURERS OF ROLLER BEARINGS FOR INDUSTRIAL PURPOSES

AMERICAN ROLLER BEARING CO.
PITTSBURGH, PENNA.

SPECIALISTS IN PRODUCTION OF ROLLER BEARINGS FOR THE OIL INDUSTRY

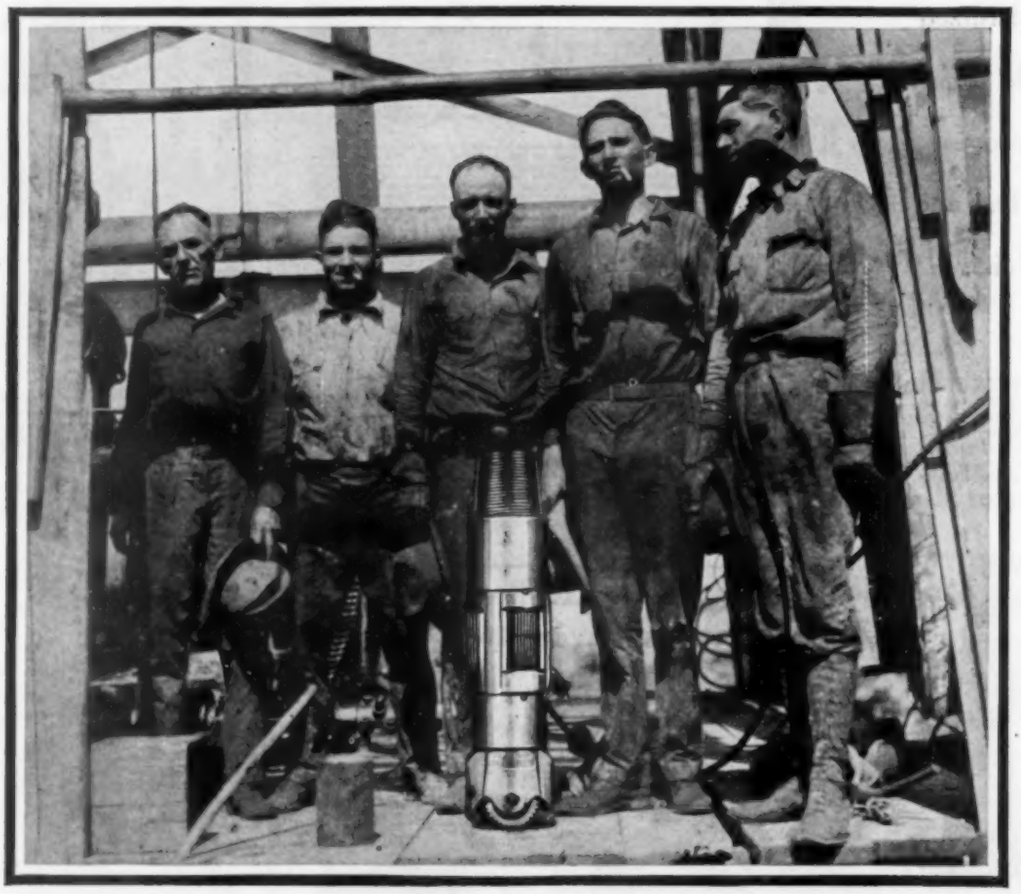
American Heavy Duty Roller Bearings "are giving the highest efficiency ever attained" in these hoists.



Use Exclusively in the Drilling Equipment made by

American Well & Prospecting Co.
Boykin Machinery & Supply Co.
Hopper Machine Co.
Latex Iron & Steel Works, Inc.
Lucey Manufacturing Co.
Oil Well Supply Co.
The Star Drilling Machine Co.

Get them in the first place; use them to replace plain bearings



"Hats Off" to Agathon Alloy Steel Bits

Ask the roughnecks on the job. They'll tell you their hats go off to bits made of Agathon Alloy Steel every time. They know how such bits reduce the number of pullings—how they speed drilling—how they outlast ordinary bits three to one. Insist that your next bits be made of Agathon Alloy Steel—then note the savings in time, labor and money. Send for our Agathon Alloy Steel handbook and let our metallurgists help you. No charge.

CENTRAL ALLOY STEEL CORP., Massillon, Ohio

Cleveland	Detroit	Chicao	Los Angeles, California
New York	Syracuse	Philadelphia	Tulsa, Oklahoma

AGATHON STEELS

AGATHON
ALLOY STEELS

Say you saw it in The OIL WEEKLY

Treats *All Varieties of* PETROLEUM EMULSIONS

We offer varieties of Tret-O-Lite to meet varying conditions, and substantially **ALL** varieties of "cut oil" may be handled by this method with 100% complete recovery of their petroleum content.

Tret-O-Lite is the world's most widely used treating process, having proven in practice to be the most simple, rapid, economical, and **THOROUGH** process available. Do not make the mistake of adopting a treating process without investigating the Tret-O-Lite method. Our nearest field expert will be glad to call on you and explain this process fully, without obligation.

WM. S. BARNICKEL & COMPANY
St. Louis, Mo.

Offices and Plant: Webster Groves, St. Louis County, Mo.

Process Patented

Tret-O-lite
Reg. U. S. Pat. Off.

Can You "Make Friends" With the Valves You Use?

The best friends of Darling Valves are those who have tried them out and found that Darlings always seemed to bring them better luck. The wise buyer knows that the "better luck" feature of Darling Valves is *built in* at the Darling Factory, along with easy operation, fewer repairs, and much longer life.

Diagrams of construction, showing how and why Darlings operate easily, shut tight, and outlast others, will be sent upon request. Write today for Bulletin No. 14.

DARLING VALVE & MANUFACTURING CO.

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New York Chicago Oklahoma City Houston

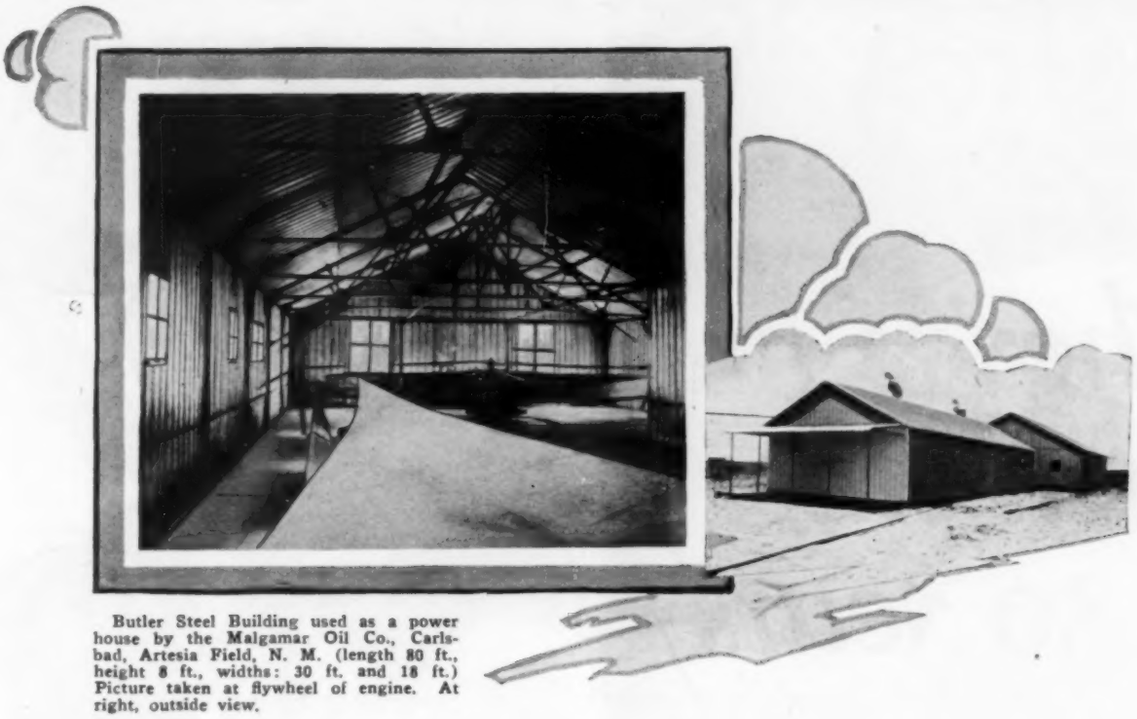
Mid-Continent Distributors:

Frick-Reid Supply Co. Atlas Supply Co.
International Supply Co. Petroleum Supply Co.

California Distributor:
Petroleum Equipment Company, Los Angeles

TRADE DARLING MARK

Say you saw it in The OIL WEEKLY



Butler Steel Building used as a power house by the Malgamar Oil Co., Carlsbad, Artesia Field, N. M. (length 80 ft., height 8 ft., widths: 30 ft. and 18 ft.) Picture taken at flywheel of engine. At right, outside view.

Steel Power House at Carlsbad

Built by Butler

Butler reliable dealers are:

M. & V. Tank Company, at Wichita Falls, Vernon, Olney, Nocona, Panhandle, Cross Plains and Amarillo, Texas.

Drane-Humphrey Co., at San Angelo, Big Lake and McCamey, Texas, and Carlsbad, New Mexico.

Drane Tank Company at Tulsa and Holdenville, Oklahoma, Eldorado and Madison, Kansas.

M. A. Trimmer, at Blackwell, Oklahoma.

D. H. Greenwood, 716 Transportation Bldg., Los Angeles, California.

Southern Steel Company at San Antonio and Mirando City, Texas.

Petroleum Specialties Co., at Casper, Wyoming.

Thomas Moran, at Oil City, Shreveport and Georgetown, Louisiana.

Continental Supply Co., at Kevin, Montana.

G. J. Gillespie, 32 Fenchurch St., London, E. C. 3, England.

Power houses like the above used by the Malgamar Oil Company are also seen in the Salt Creek, Wyoming, field and elsewhere. Butler **Ready-Made** Steel Buildings reduce fire hazards by being fire-proof and lightning proof when properly grounded.

They also protect the belting and machinery around the drilling rig from the sun and bad weather.

For all needs of oil men—in field and elsewhere — Butler Buildings are ready for quick, economical erection. See a Butler dealer or write us for building catalogue.

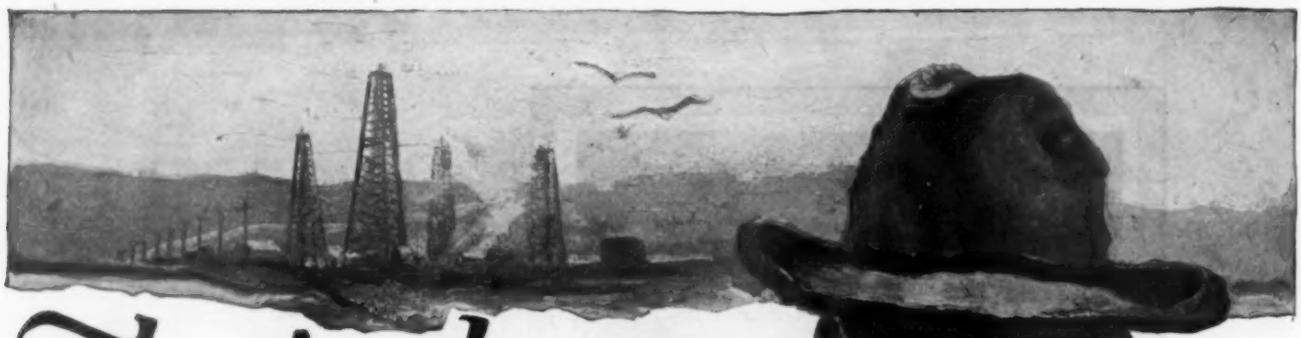
Butler Products include: READY-MADE Steel Buildings, Cans, Funnels, Buckets, Measuring Pumps, Truck Tanks, Underground Tanks, Storage Tanks, Bolted Tank, Etc.

STEEL BUTLER PRODUCTS

Butler Mfg. Co.

Kansas City, Mo.
Minneapolis, Minn.
Foreign Dept.:
Room 903, 44 Whitehall St.,
New York, N. Y.

Butler Ready-Made Steel Buildings



They've known each other for 30 years/

THEY'RE OLD-TIMERS, both of 'em. They know what the oil fields expect in the way of service from both men and metal, and can give good accounts of themselves for the last 30 years.

Reading, the Genuine Wrought Iron Pipe, has grown up with the industry, and has the respect of every old-established operator, from Pennsylvania to the Pacific. Reading's claim to this distinction lies in the fact that it gives unfailing service for two to three times longer than the best of steel pipe. Reading Genuine Wrought Iron Pipe resists corrosion and crystallization to the limit, and its double welds are stronger than the pipe itself.

No tie-ups, no losses, when your Tubing, Casing and Line Pipe are marked "Reading."

READING IRON COMPANY
Reading, Penna.

World's Largest Makers of Genuine Wrought Iron Pipe

OIL WELL SUPPLY COMPANY, DISTRIBUTORS
Inquire at any of their 100 branches

READING PIPE
GENUINE WROUGHT IRON

For Sup
Back-up Service!

Swing the chain of Williams' "Vulcan" Back-Up Tongs around any tool-joint. Snap it in place and start the rotary. That's all there is to it. The saw tempered teeth "bite" instantly and hold with a bull dog grip.

Short, compact, light weight, they're the handiest chain tongs on the market—and the strongest. Hard work won't hurt them—they're built for it. Positively guaranteed.

Try the new No. 115½ (**certified** strength of 30,000 lbs.) taking all sizes of tool joints.

J. H. WILLIAMS & CO.

"The Wrench People"

New York **BUFFALO** Chicago

GENUINE WILLIAMS

SUPERIOR DROP-FORGED TOOLS

"VULCAN" BACK-UP TONGS

Magnolia Petroleum Company

Producer *Refiner* *Jobber* *Distributer*

High Grade Petroleum Products

FUEL OIL

LOADING STATIONS AT

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HERMA, ARK. MIRANDO

MANUFACTURER OF

Magnolene
REG. U.S. PAT. OFFICE

THE

DEPENDABLE LUBRICANT

"A Grade for Each Condition

For satisfactory operation of Ford Cars use Magnolene Motor Oil for Fords

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Inquiries Respectfully Solicited

The LARKIN Improved SAND PUMP

(Patented)

Manufactured at Butler, Penna.

Furnished with either or both of these bottoms

LARKIN REGULAR BOTTOM

LARKIN BIT BOTTOM

—is giving satisfaction everywhere

The LARKIN Improved Sand Pump is flexible, in that it operates success fully at all depths—under all conditions. Under normal conditions this Pump will, when equipped with its REGULAR Bottom, bring out the sand and sediment in record time.

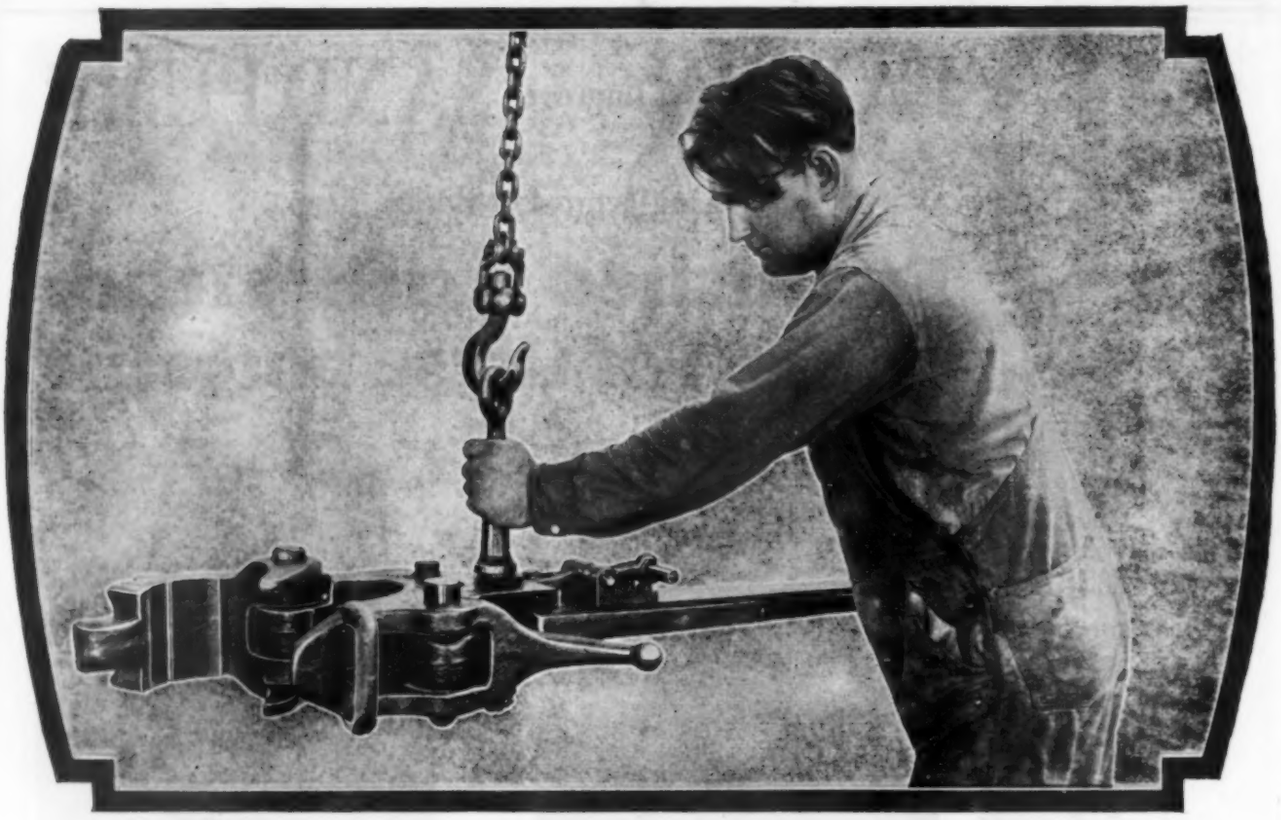
Where cavings have packed hard, the Larkin Bit Bottom may be used. It will break up the hard formations efficiently, and so quickly pass the material through to the pump, that the pump may be operated at full capacity without being delayed to any extent, even by the worst conditions encountered. If you want to be prepared to meet the toughest pumping jobs with the best pump, get the Larkin and have it equipped with either the Regular or Bit Bottoms.

The LARKIN Improved Sand Pump will clean out more wells, for more years, than any sand pump made. Its Barrel is of "NATIONAL" Seamless Steel Tubing. In every detail of construction, the materials used are unexcelled for quality.

There is no better equipment than this Larkin Leader. It has been made at Butler Penna., for years. It is still made there and there only. Even more today than when the Eastern fields were young, it is the leading sand pump on the market.

Write for Circular and Price List

LARKIN & CO., Butler, Penna.



A One-Man Tong

The GUIBERSON Tong is a one-man tong, because it:

(1) Balances perfectly;
(2) Takes hold with one thrust;
(3) Latches automatically and instantly;
(4) Can be reversed "with two fingers in two seconds";
(5) Is easily detached by a light blow on the latch.

The GUIBERSON Tong, by use of a specially designed PIPE DIE and YOKE, is easily converted into an efficient Drill Pipe Tong. Patented.

"Better Be Safe Than Sorry"

THE GUIBERSON CORPORATION

Box 1106, Dallas, Texas

CALIFORNIA BRANCH: 1506 Santa Fe Avenue, Los Angeles

402 W. First St., TULSA

506 Trust Bldg., NEWARK, O.

GUIBERSON

BETTER BE SAFE THAN SORRY

Say you saw it in The OIL WEEKLY

Do the job right!

Tie the casing strings the right way in the first place and your well will be under control always.

Regan Pipe Suspension & Control Head

Here is the device that has revolutionized casing setting.

Thousands in use and not a single one has ever failed.

Provides the one efficient way to obtain proper pipe suspension.

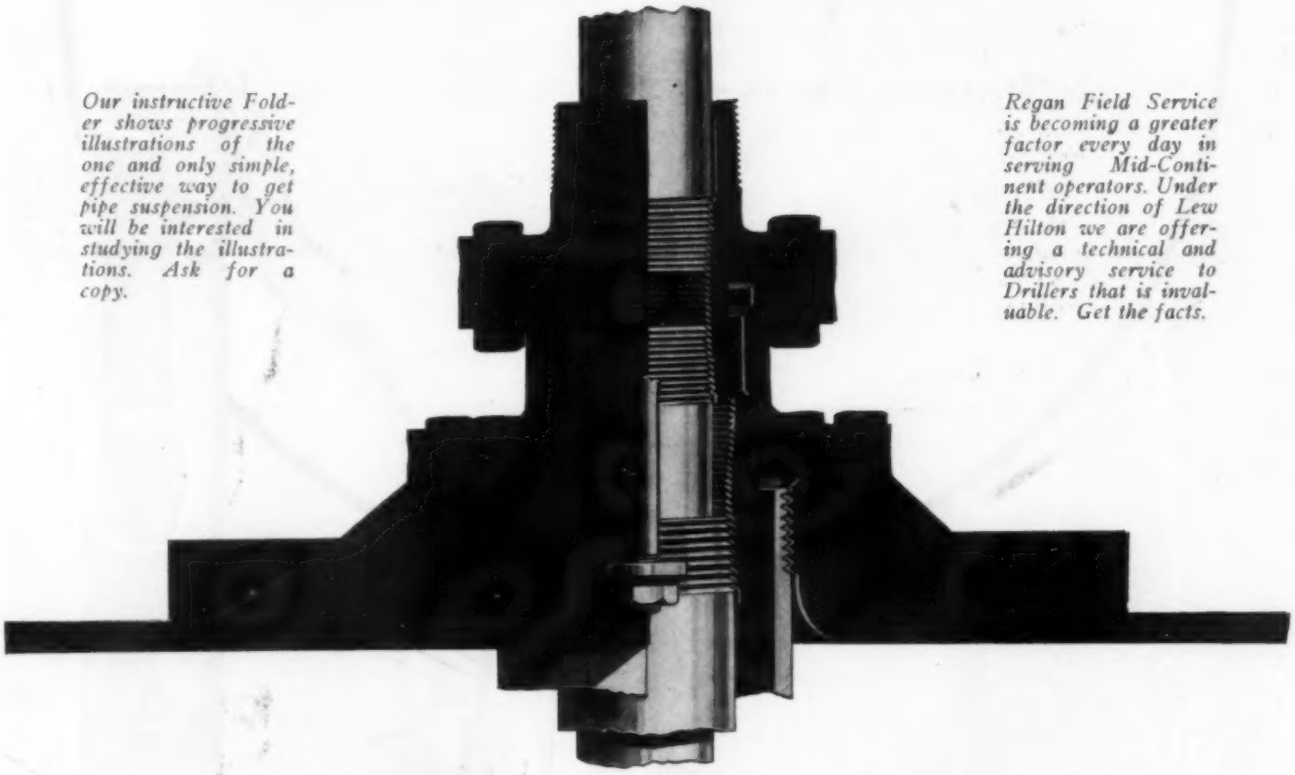
Controls pressure at all times.

Conserves cellar space.

Prevents blowouts.

Prevents gas leaks and fire hazard.

Our instructive Folder shows progressive illustrations of the one and only simple, effective way to get pipe suspension. You will be interested in studying the illustrations. Ask for a copy.



Regan Field Service is becoming a greater factor every day in serving Mid-Continent operators. Under the direction of Lew Hilton we are offering a technical and advisory service to Drillers that is invaluable. Get the facts.

Regan

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Designers and Manufacturers of Quality Oil Well Equipment

The DRILLER KNOWS!

WASTED HOURS spent in pulling long strings of drill pipe every time bits are changed or cores taken are ABSOLUTELY UNKNOWN to the driller using the Standard Collapsible Rotary Drill and Core Barrel.

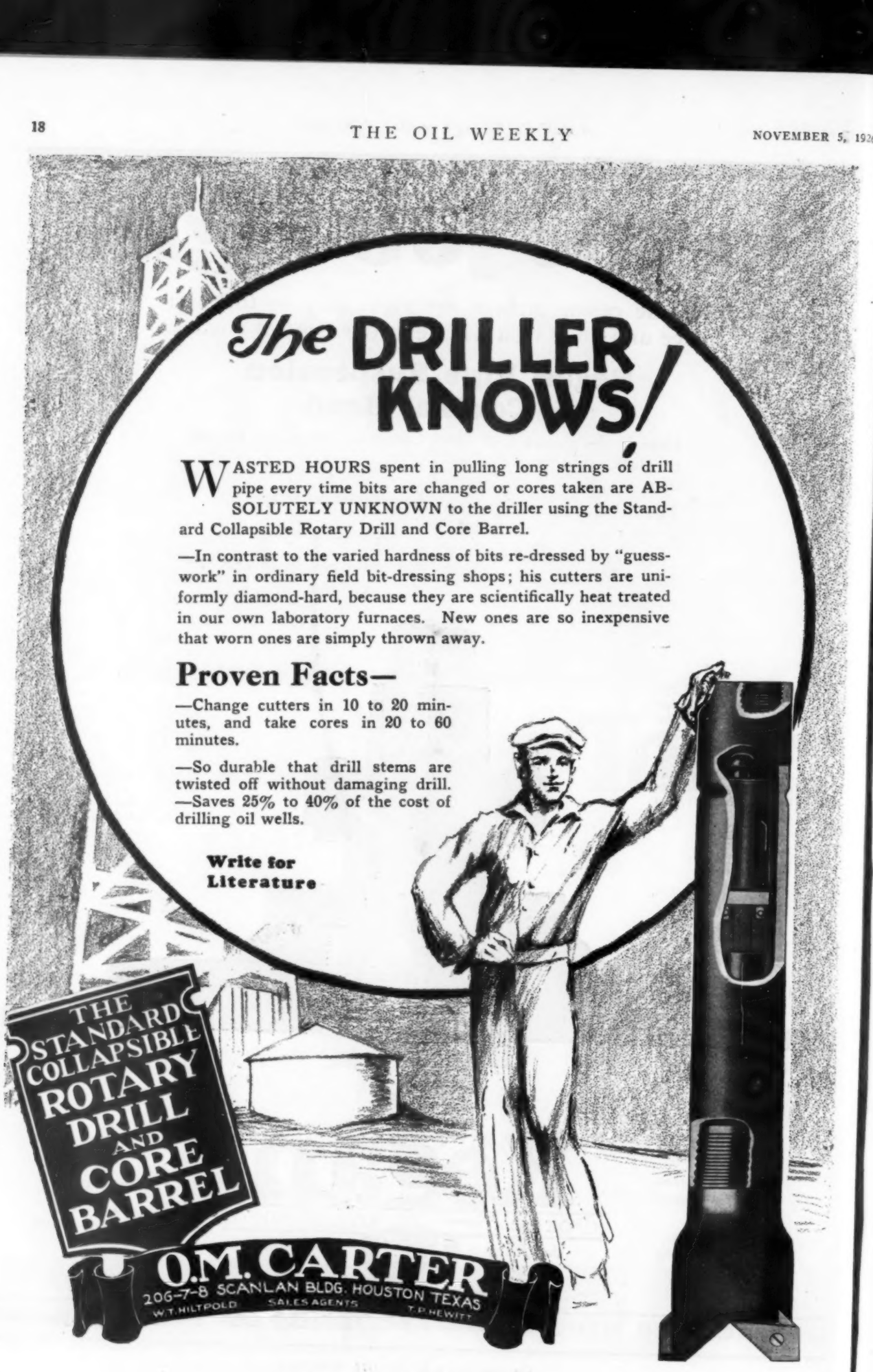
—In contrast to the varied hardness of bits re-dressed by "guesswork" in ordinary field bit-dressing shops; his cutters are uniformly diamond-hard, because they are scientifically heat treated in our own laboratory furnaces. New ones are so inexpensive that worn ones are simply thrown away.

Proven Facts—

—Change cutters in 10 to 20 minutes, and take cores in 20 to 60 minutes.

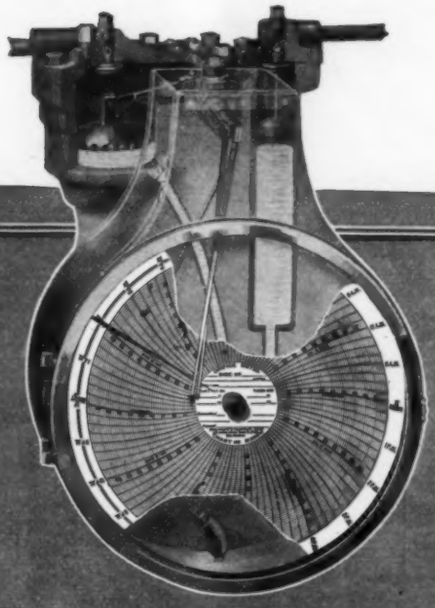
—So durable that drill stems are twisted off without damaging drill.
—Saves 25% to 40% of the cost of drilling oil wells.

Write for Literature



THE STANDARD COLLAPSIBLE ROTARY DRILL AND CORE BARREL

O.M. CARTER
206-7-8 SCANLAN BLDG. HOUSTON TEXAS
W.T. HILTPOLD SALES AGENTS T.P. HEWITT



"No type of volume measuring apparatus has received so much attention as the simplest form of velocity meter, the ORIFICE meter. This type meter, with differential gauge, has proven to be the most accurate and dependable apparatus designed for the measurement of gases and liquids flowing in pipe lines.

"Many simple and complicated forms of velocity meters have been designed, but up to the present time, none has obtained any advantage over the ORIFICE, except at the expense of those most fundamental qualities —accuracy and dependability."

Quoted from Westcott's "Measurement of Gas and Liquids by Orifice Meter"
—Second Edition

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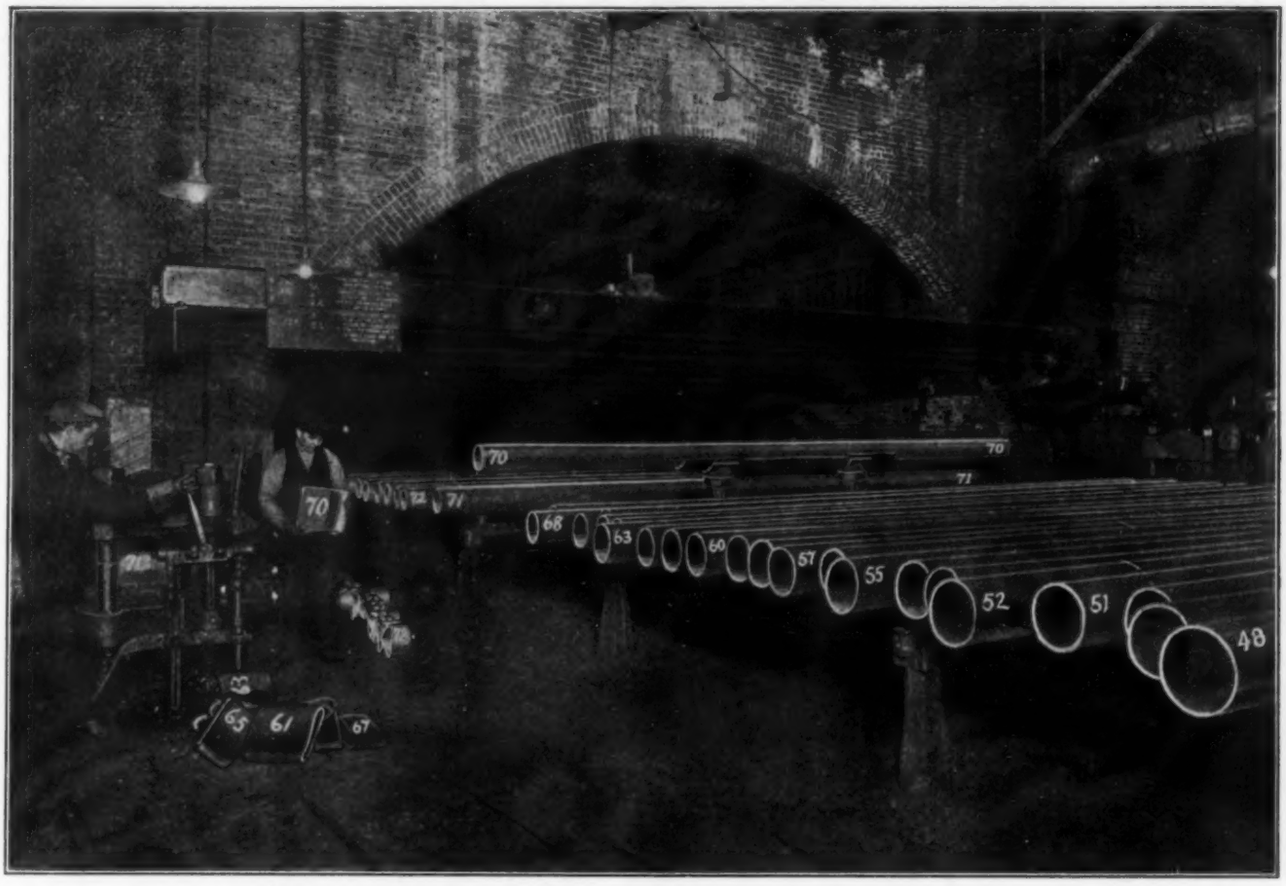

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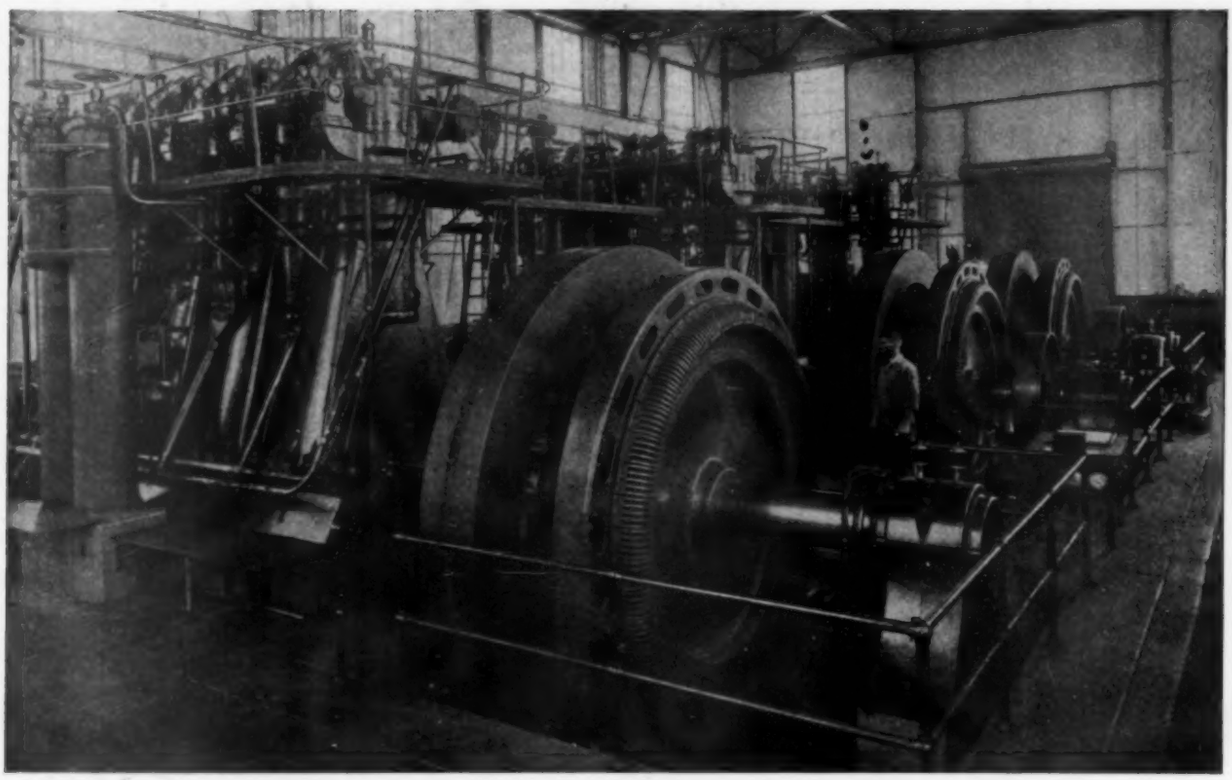

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McINTOSH & SEYMOUR DIESEL ENGINES

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SPECIALIZED OIL JOURNALS
GULF PUBLISHING COMPANY
PRODUCING REFINING MARKETING

November 5, 1926 Volume 43, Number 7

The OIL WEEKLY

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Published Weekly by GULF PUBLISHING COMPANY, INC.
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R. L. DUDLEY, *President;* A. L. BURNS, *General Manager;* SPENCER W. ROBINSON, *Editor*
Office of Publication: 1716 Dallas Avenue, Houston, Texas.

NEW YORK: Room 832, 250 Park Avenue, R. P. Swinsky, Manager. PITTSBURGH: 2201 First National Bank Bldg., W. W. Pigue, Manager. CHICAGO: 476 First National Bank Bldg., O. R. Waller, Manager. LOS ANGELES: 1201 Haas Bldg., Wm. V. Gross, Manager. TULSA: 214-15-16 Atco Bldg., J. F. Carter, Jr., Manager. FORT WORTH: 203 W. T. Waggoner Bldg., H. H. King, Manager. Issued Friday of each week. Single copies 10 cents. Subscription price, Domestic $1.00 a year, Foreign $2.00 a year. Subscriptions restricted to those engaged in the producing and pipe line branches of the oil business or the manufacture and distribution of oil field supplies. Advertising rates on application.

Looking At It from the Operator's Point of View

Mr. Morrison, who is shown operating the big 18-inch Landis Pipe Threading and Cutting Machine, is Foreman of the Pipe Shop of the Waite Phillips Petroleum Co., Rainbow Camp, Okla.

Mr. Morrison says: "I have used three other makes of pipe machines, but Landis is the best I have ever handled.

"The best thing about the Landis is the lack of repairs needed. Several years ago, in the Tonkawa Field, I had a pipe machine that was down continually for six months on account of breakdowns and waiting for repairs. From now on, give me Landis and I can promise to get the work out in good shape."

It is the man actually responsible for cutting the threads that fully appreciates the value of the Landis Pipe Machine.

He knows that with the Landis there will be no rejections and that he will be passing out good, reliable threads that will hold. He can push it to the limit and is not afraid of breakdowns for the Landis is the most powerful machine on the market and will stand the gaff.

Give your Shop Foreman a Landis and watch him produce. He will be glad to get it.

When will you be ready to talk business?

LANDIS MACHINE COMPANY, Waynesboro, Pa.

Wilcox Sand Producing Wells in the Seminole City Field

Owner—	Farm	No.	Description	Sand Record	Date Completed	Elevation	Initial Production
Mid-Continent Pet. Corp	Rentie	1	SEc	14-9-6 4188-4203	October 4	948	2000
Carter Oil Co.	Reed	2	NE SE SW	24-9-6 4155-5170	October 2	880	1700
Barnsdall Oil Co.	Carter	1	NE SE NW	24-9-6 4130-4132	October 18	878	3195
Tidal-Osage Oil Co.	Mahardy	1	NE SW	24-9-6 4157-4169	September 23	941	4320
Tidal-Osage Oil Co.	Mahardy	2	SE NE SW	24-9-6 4187-4193	September 22	965	2130
Gypsy Oil Co.	Carter	1	SE SW NW	24-9-6 4170-4179	August 31	889	3150
Gypsy Oil Co.	Wolf	1	SE SW NW	26-9-6 4080-4092	October 21	904	7200
Gypsy Oil Co.	Fixico	1	SW NW NE	26-9-6 4143-4153	October 24	858	1728
Gypsy Oil Co.	Fixico	2	SE NW NE	25-9-6 4169-4171	October 17	858	***
Ind. Ter. Ill. Oil Co.	Reed	2	NW SW NE	24-9-6 4168-4182	October 1	907	2000
Ind. Ter. Ill. Oil Co.	Bowlegs	1	NW SE	26-9-6 4125-4130	October 26	853	2904
Ind. Ter. Ill. Oil Co.	Bowlegs	3	SW NW NE	26-9-6 4043-4050	October 16	849	6500
Independent Garland	Fixico	1	SW NE	26-9-6 4055-4073	July 16	855	6380
Independent Garland	Fixico	2	SE SW NE	26-9-6 4101-4105	September 25	855	4450
Independent Garland	Fixico	3	NE SW NE	26-9-6 4077-4081	October 7	857	2400
Independent Garland	Fixico	4	NW SW NE	26-9-6 4131-4134	October 1	856	2160
Tidal-Osage Oil Co.	Fixico	3	SE NE NW	26-9-6 4110-4119½	October 25	891	3120
Pure Oil Co.	Strother	1	NE SW	26-9-6 4125-4130	October 25	902	7200
Pure Oil Co.	Strother	2	NE SE SW	26-9-6 4058-4070	October 18	857	8760
Amerada-Gardner	Kellingworth	1	SE SW NE	23-9-6 4120-4125	September 15	931	6600
Sinclair Oil and Gas Co.	Cudjo	1A	NE NW	35-9-6 3988-4006	October 26	845	9600
Superior Oil Corp.	Grisso	1	NW SE NW	35-9-6 3990-3993	October 27	847	6000
Indep. Oil and Gas Co.	James	1	NW SW SE	26-9-6 4028- ***	October 27	***	***
Sinclair Oil and Gas Co.	Cudjo	1B	NWc	35-9-6 3959-3973	October 28	869	8760
Ind. Ter. Ill. Oil Co.	James	8	SW NW SE	24-9-6 4192-4204	October 29	947	3671

***Shut down temporarily.

Wilcox Runs High to Southwest At Seminole City

Two or three Separate structures may exist Hunton and Viola limes also productive

By HASTINGS FAULKNER
Staff Representative

Tulsa, Okla.—While the question of immediate concern in the Seminole area of Oklahoma is that of pipe line outlet for oil now available, subsurface conditions, or the size and direction of structure and structures in the Wilcox sand, are of far greater importance.

Not enough drilling has been done to determine subsurface conditions. Limited development, however, points toward the existence of two or more Wilcox producing structures, with that around section 26-9-6 the larger.

Certainly there is a "low" between sections 24 and 26 and another between sections 23 and 26. It is possible that a Wilcox structure may include parts of sections 14, 23 and 24, leaving another in sections 26 and 35, with possibly others to be added.

Low Spots Evident

The cross section, shown herewith, runs slightly northeast southwest, taking in the longest distance of Wilcox production in the field. The northernmost well is that of the Mid-Continent Petroleum Corporation, which found the Wilcox 3240 feet below sea level. Slightly more than a half mile south the Amerada-Gardner well in the southeast corner of the southwest of the northeast of 23-9-6, had the Wilcox 3189 feet below sea level. So this well is 41 feet higher in the Wilcox than the Mid-Continent well.

Coming south to the Gypsy Oil Company's No. 1 Fixico in the southwest of the northwest of the northeast of section 25-9-6, there is a drop of 89 feet in the Wilcox. The Gypsy found the Wilcox 3,285 feet below sea level, the lowest yet found in the area.

The distance between the Gypsy well and that of the Amerada-Gardner partnership to the north is three-fourths of a mile. With the Gypsy well showing the Wilcox 89 feet lower than the other, there is reason to believe that further drilling will reveal the Wilcox barren of oil somewhere between the two, thus separating the area into at least two Wilcox structures.

Big Structure Certain

Likewise there is some indication that the Wilcox production of section 24 will not connect with that in section 26. Early this week the Prairie Oil & Gas Company had drilled to 4,178 feet in No. 1 Gross in the northeast corner of the northwest of the northwest of section 25-9-6, without any show of oil. This well is about midway between present Wilcox production in sections 24 and 26.

With the Wilcox at least running low between sections 23 and 26, and between 24 and 26, there is reason to expect at least two structures to be developed in the area.

Another question yet to be answered is the possibility of connections in the Wilcox between sections 14, 23 and 24. So far there is nothing on which to base opinion. It is possible that the area now bound by the Mid-Continent well in the southeast corner of section 14, the Amerada-Gardner well in section 23 and the several Wilcox wells in section 24, will be connected to form one pool.

Should further drilling find a "low" between section 24 on the east, and 14 and 23 on the west, that will leave three Wilcox pools for the area.

Regardless of connections between the present three producing spots in the Wilcox, it is evident that one immense structure does exist. It begins in section 26 and runs south into section 35, as shown by wells already completed. Its further extent will be determined by future drilling.

Going back to the cross section, the trend of this structure in the Wilcox

leaves evidence of extending much farther south than present wells show.

Rises to South

Starting with the Gypsy's No. 1 Fixico, the lowest Wilcox well in the pool, this formation rises gradually to the south to the Superior well. The Gypsy well had the top of the Wilcox 3285 feet below sea level. The Superior well found the Wilcox 3116 feet below sea level. These wells show the Wilcox 169 feet higher to the south in a distance of slightly more than a mile.

As the Superior well, No. 1 Grisso, in the northwest corner of the southeast of the northwest of section 35-9-6, is the southernmost well of the field, the extent of the field in that direction is a matter of conjecture.

Should folding prove as gradual on the south flank of the structure as it has on the north, following the line of the accompanying cross section, a field of three miles in length awaits development.

High to West.

Width of the structure offers less evidence on which to base conclusions. There is, however, little chance that the structure will extend far east of the north-south line.

Well No. 1 Fixico of the Independent-Garland partnership in the southwest corner of the northeast quarter of section 26-9-6, the discovery well in the Wilcox, had the top of this formation 3,200 feet below sea level. One location to the east well No. 2 on this lease found the Wilcox 96 feet lower.

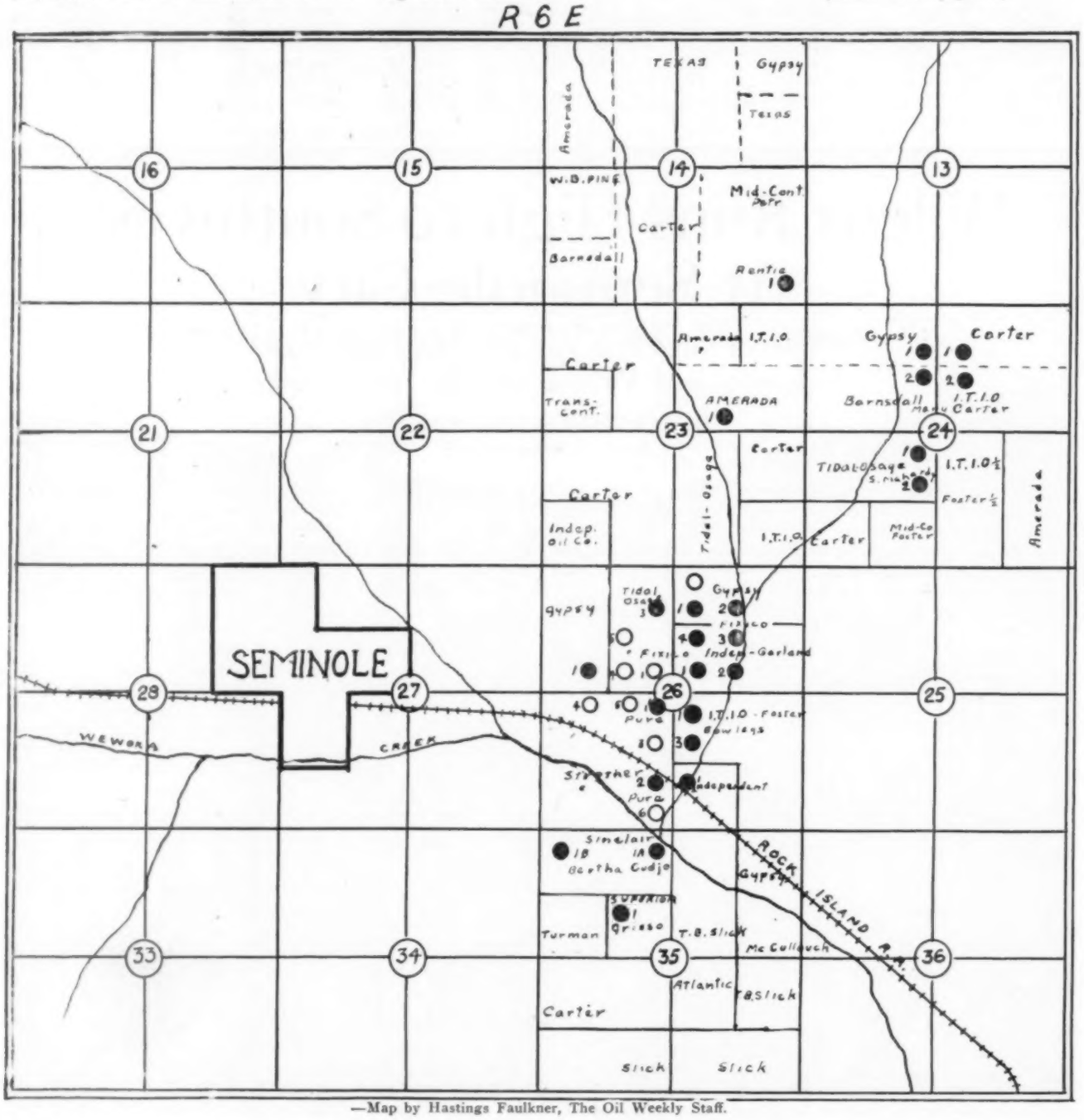
But to the west the Wilcox showing higher than along the accompanying cross section.

The Gypsy Oil Co.'s No. 1 Wolf in the southeast corner of the southwest of the northwest quarter of 26-9-6, had the top of the Wilcox 24 feet higher than the discovery well. The Gypsy well is almost a half mile west of the other.

Another example of the Wilcox running higher to the west is by comparing depths of the two Cudjo wells of the Sinclair Oil & Gas Company. No. 1-A in the northeast corner of the northwest of section 35-9-6 had the top of the Wilcox 3143 feet below sea level. Directly west across the quarter section well No. 1-B topped the Wilcox at 3,090 feet, being 53 feet higher.

This well, No. 1-B Cudjo in the northwest corner of section 35-9-6, is the high point for the Wilcox, based on present completed wells. The fact

(Continued on page 44.)



—Map by Hastings Faulkner, The Oil Weekly Staff.

Figures Show Industry Facing Period Of High Production

October output reaches record height for year with indications of further increases in November

By A. R. McTEE
Staff Representative

CRUDE oil production for October, although not establishing a record for the industry, did exceed the output of all previous months of this year. Substantial gains from California and Oklahoma, with a phenomenal increase in Texas brought the total of all fields to 67,983,465 barrels, representing a gain of 15,980 barrels in daily average over September. This increase added to the extra day which October had, gave a gain of 2,672,495 barrels.

The striking thing about this gain is that 2,243,590 barrels of it came from Texas. As if trying to surpass all the other states in output and at the same time outdo all her own previous records, the Lone Star state showed a gain in daily average amounting to 54,800 barrels. California actually gained only about 138,090 barrels, and the increase in Oklahoma totaled 131,600 barrels, leaving Texas to make up practically all the rest of the 2,672,495 barrels.

The month was truly a phenomenal one for Texas. Completions in this state totaled more than twice as many as in Oklahoma, and fell short of 1000 by only 10. Initial production, too, lacked only 51,000 barrels of reaching the half-million mark, and the gross output of the state reached the gigantic total of 18,510,446 barrels. California, the state that has led the United States in oil output for more than three years, exceeded Texas this month by less than 200,000 barrels, and there is strong probability that November will see Texas producing more oil than any other state in the United States.

Texas Record

New Production and completions reached a peak for the year in the North and Central West Texas districts as result of heavy operations in the Texas Panhandle and the Crane-Upton County district in West Texas.

The Texas Panhandle district gave a good account of itself with 133 completions having a combined initial flow of 89,416 barrels. Hutchison County was the principal contributor of this new production by adding 78,425 barrels from 105 completions, thereby giving the county a total of slightly more than 500 producing wells at the close of October. The peak on drilling activity and daily production in Hutchinson County is expected to be reached early in November, if not already at hand, as cold weather interferes with field work and crude movement to a noticeable extent in the Panhandle. The Wilcox-Pampa field in Gray County section of the Panhandle forged to the front and contributed most of the new production outside of Hutchinson County.

The Turbeville ranch in Archer County accounted for a number of unusually large oil producers during October from 20 to 30 feet of oil sand found at the 1500-foot level. Archer County added 14,610 barrels of new productoin from 76 completions during October, such being the highest level reached so far this year on new production during a single month. Montague and Cook Counties also experienced an active drilling campaign during October, while the re-drilling of an old field at Sunshine Hill, in upper Wichita County, resulted in a sharp gain in field work. Only routine field work occurred in Wilbarger and Young Counties.

The shallow oil producing horizons in Brown and Shackelford Counties scored important extensions during October, while the extension of the Cook field in the latter county paves the way for the drilling of a score or more of flowing wells in the 1200-foot sand pay. This field was extended by the Tannehille Oil Company's Moberly semi-wildcat with an initial flow of 720 barrels. In Brown County, the Lester-Fry and Gibson-White pools near the west edge of the county attracted considerable attention when the producing areas were extended with good sized producers, and an active drilling program is underway. Other than a few scattered oil strikes in the vicinity of production, Stephens and Eastland Counties failed to offer any important developments.

West Texas

The Crane-Upton County district in West Texas registered a large number of good oil producers, ranging from 26 to 34.5 gravity, and field work continued on a large scale in the face of a price reduction. Gulf's McElroy field in eastern Crane County is apparently the nearest approach to the Big Lake field of any discovery made in West Texas lately, and late in October a completion was made at 2750 feet with an initial flow of 120 barrels per hour, although not completely drilled in. Ector County contributed its first oil production during October, when J. E. Cosden et al's Connell 1-A swabbed and flowed 80 barrels from sandy-lime pay at 3465-3546 feet, with some water in evidence. Late in October the Mid-Kansas Oil & Gas Company brought in a wildcat oil producer in

OCTOBER U. S. PRODUCTION

Following is the gross estimated production of crude oil in the United States for the month of October as compiled by The OIL WEEKLY:

State—	Barrels
California	18,756,240
Mountain States	3,080,470
Eastern States	3,289,030
Texas	18,510,446
Oklahoma	14,967,580
Kansas	2,654,420
Louisiana	2,153,570
Arkansas	4,571,700
Totals	67,983,456
September	65,310,970

PAST TWELVE MONTHS

The record for the past twelve months is an interesting study for comparison purposes, the following table giving field statistics for all states in the Union.

Month—	Completions	Producers	Gas Wells	Failures	Initial Prod.
October, 1925	2,516	1,595	248	673	268,085
November	1,863	1.054	248	561	179,246
December	2,007	1,179	237	591	232,669
January, 1926	2,059	1,216	257	586	178,963
February	1,695	989	197	509	197,958
March	1,891	1,156	211	525	214,488
April	2,311	1,468	224	619	317,173
May	2,082	1,250	179	653	256,114
June	2,188	1,365	178	645	231,473
July	3,068	1,919	287	862	358,646
August	2,368	1,507	206	655	361,165
September	2,480	1,602	217	661	318,787
October	2,916	1,914	264	738	449,081

UNITED STATES FIELD STATISTICS

Following are the completions showing producers, gas well, failures, and initial production of crude by states for the month of October, as compiled by The OIL WEEKLY:

California	89	79	..	10	34,948
Kansas	164	99	3	62	15,718
Kentucky	126	93	4	29	1,296
Michigan	15	15	..	..	366
Mountain States	62	34	..	28	7,705
New York	50	50	..	..	150
Ohio	230	141	56	33	3,099
Oklahoma	480	273	33	174	115,168
Pennsylvania	278	225	38	15	2,060
W. Virginia	178	56	91	31	549
Louisiana	89	46	11	32	10,986
Illinois	40	26	..	14	778
Indiana	24	12	4	8	367
Arkansas	98	74	4	20	4,379
Tennessee	3	3	..	..	400
Texas	990	688	20	282	251,112
Total	2,916	1,914	264	738	449,081
September	2,580	1,602	217	661	318,787

General view of the Seminole City pool from flow tanks of the Independent Oil and Gas Company's Garland No. 1 Fixico, southwest corner northeast 26-9-6, looking east.

eastern Pecos County, near the Pecos River, from sandy-lime pay at 997 feet. The latter discovery is flowing by heads through 12½-inch casing, and is rated better than 100 barrels daily.

The Mexia-Corsicana district is again experiencing a revived interest in wildcat activity, and an effort is being made to explore the Trinity sand horizons at Kosse, Mexia and Richland. Turn key contracts have been made for 550-foot tests in the former two areas, while the Sun Oil Company's deep test at Richland is scheduled to go below 5000 feet. The Nigger Creek field is about drilled up, and production is settling down to the pumping stage, with a daily average of 11,060 barrels at the close of October.

Peak Reached

It is generally believed that the peak of field development in the Panhandle and West Texas sections has been reached this year, on account of cold weather, which greatly hampers drilling. However, handling facilities to take care of 200,000 barrels of oil are now being installed in these districts, and even if drilling is checked, it is probable that much of the stored oil will be moved out by tank cars to make room for early spring production. Loading racks are being established in the various productive areas to accomodate 900 tank cars. During the last week in October, production in the Panhandle district gained 6,760 barrels, and tank car movement of crude 25,000 barrels. The first week of this month brought a 2300 barrel drop in production, however, but with further increases in tank car movement of crude.

Spindle Top, the field responsible for the gain approximating 700,000 barrels in the Gulf Coast, was producing 94,460 barrels of oil on November 1 from 74 wells. Water encroachment is making itself felt in practically all Spindle Top wells, and out of the 74 producers, 60 are showing 30 per cent water. One of the best wells completed so far at Spindle Top was brought in late in October, from a deeper horizon than the regular pay sand. This well made 20,000 barrels when first completed and is still flowing 7000 barrels, pinched in. It is believed that this well will lead to a general program of deepening.

The field now has 50 drilling wells. If deeper production is not discovered as a result of the big well, it is practically certain that the number of wells drilling will sustain the output of the field.

California

California, although showing an increase during the month just past, is looked upon as the source of a much greater gain this month. Huntington Beach is now producing about 25,000 barrels daily, and is being drilled extensively. There is also the possibility of a new area in this field being opened to development, pending legislation by the town of Huntington Beach. This month there were 13 producers completed in the townsite area, with a total initial production of 13,400 barrels. During November there will be probably twice as many wells brought in as were reported for October, giving a probably daily increase of 25,000 barrels in yield.

Ventura Avenue is the second field in California expected to substantially boost the total output. Daily average recovery now is 50,000 barrels. Estimates place the output at 75,000 by the first of the year, and probably by the end of November. About 15 wells are due for completion within the next few weeks, and Ventura Avenue wells have been averaging 4,000 barrels initial flow.

Seal Beach, the third field in California that is up for immediate exploitation, has four wells to be brought in this month. If these keep up the average of wells already producing, this field will have more than 7000 barrels new production.

Thus taking the three fields of California, where new production is sure to be developed, a conservative estimate gives 60,000 barrels as the possible daily average gain this month.

Seminole, the high spot in Oklahoma, seems almost certain to reach 150,000 barrels by the first of the year, if not sooner. Adequate pipe-lines and handling facilities for that much oil are rapidly being provided for the field, assuring steady drilling. In the last week of October the field had 18 wells in the Wilcox sand, with 12 others due for immediate completion. Average initial production of the Wilcox sand wells to date has been 2880 barrels. Wells south and west of the Wilcox discovery are running high on the structure, indicating a large producing area.

From the foregoing, it is be concluded that California and Oklahoma are the two sources of expected increases this month. Texas may continue to show gains, but this seems hardly probable, inasmuch as winter is so near here.

If Oklahoma gives as much as 70,000 barrels additional crude to the daily average and California supplies 60,000 barrels, and Texas does as much as hold her own, November will show more production than October.

Oklahoma

That producers have misgivings about Oklahoma, especially, is emphasized by the readiness with which one of the major crude buyers in the Mid-Continent district met the cut introduced by Humble Oil and Refining Company. Until Seminole got into the major pool class, the market was reasonably steady, with most of the uncertainty confined to the Panhandle and West Texas district. Now, however, there is no doubt but that the crude market is in for a dull season. This situation may confine itself to territory east of the Rocky Mountains, but there is a probability of a price reduction in California.

Stock increases have begun to accumulate. The season of lowered consumption of crude oil products is at hand, and with production at the highest figure of the year, giving all indications of going still higher, the only trend for the market is a lowering one.

Outside of the areas mentioned, developments during October were largely of routine nature. Rocky Mountain states are showing decreases with the setting in of unfavorable weather, and Eastern States are barely holding their own.

Among the more outstanding discoveries of the month in absolute wildcat territory was the producer completed by the Pure Oil Company at Sweet Lake, Louisiana, 19 miles southeast of Lockport. The well was originally completed for about 300 barrels of oil with 60,000,000 cubic feet of gas, but was choked down to smaller oil output. Pure Oil Company controls all the acreage surrounding the well and has made no announcement as to future plans of development.

Several extensions were made to the fields in Russell and Cowley Counties, Kansas, but these have been of minor importance.

Revised Schedule Makes Greatest Cut on High Gravities

Price reduction made by three buyers of Mid-Continent Oil; Seminole City production has big influence

By KENT RIDLEY
Staff Representative

THE long expected cut of crude prices in the Mid-Continent materialized Monday of this week, co-incident with the apparent peak of production in the Texas Panhandle, which area is responsible for the flood of oil which is directly responsible for the weakness leading to the cut. Seminole City in Oklahoma has been boosting the production of that state, but the uncertainties of the Wilcox sand in that area would not justify a market change, although it is known that this area will produce a large temporary flush of oil.

The cut was made by the Humble Oil & Refining Company, Standard of New Jersey subsidiary, and was followed by another subsidiary of that company, Carter Oil Company, in Oklahoma and Kansas. Magnolia Petroleum Company, buying in Texas, Oklahoma and Kansas for its parent company, Standard Oil Company of New York, also met the price set by Humble except on grades below 28 degrees. As this is written early in the week, no other purchasers have announced meeting the cut.

The new schedule, it will be observed, changes the differential on the gravity schedule and removes the high premium heretofore paid for the top grades of crude. This will work to the advantage of a large number of smaller producers whose output is nearer the bottom of the schedule than the top. As has been pointed out in this article in previous issues, new influences in refining have changed the relative values of crude to the larger plants.

This downward revision, it will be observed, was not preceded by any curtailment in buying and purchasers have remained anxious to hold their connections and to secure their full share of what is offered. Apparently the storage tanks which have been depleted during the last few months are to be again filled with crude at as little cost as possible.

Texas Panhandle production appears to be at or about the peak for the present, as recent completions have not been so large and the gas pressure in the principal producing centers has fallen off. A slight reduction in production already has been recorded, and the near approach of real winter weather means that this section, both because of hinderance to drilling and the nature of the oil which does not handle well in cold weather, will not be so active.

Panhandle producers have again been selling some of their surplus oil below the posted price, and their position has not been improved by the cut in the Mid-Continent, as the differential which has made Panhandle oil attractive to refiners on a price basis has been largely removed.

The crude cut has been anticipated in the gasoline market and prices on New Navy have been forced down accordingly. It is anticipated that the demand from domestic jobbers will improve as they place delayed orders which have been held for a lower market. It is anticipated by some pessimistic forecasters that the gasoline market will go lower, but it is an even guess that it will hold to present level under which refiners can break even.

The crude oil market situation of the Mid-Continent for the present revolves around the Seminole City pool.

With production there running ahead of pipe line facilities, the cut in Oklahoma and Kansas posted prices November 2 was to some extent influenced by Seminole City.

Control of Seminole City

During the past week holders of the several producing leases have held several conferences for the purposes of formulating some sort of program to retard production until pipe lines can be finished.

Wednesday morning the State Corporation Commission met for a special hearing in Tulsa for the purpose of passing on the question of passing an order to enforce regulations to stop what has been termed waste.

Meanwhile 10 pipe line concerns are striving to get transportation facilities completed to give the area daily outlet of 200,000 barrels. When present building programs are completed, the area will have rated pipe line capacity of 230,000 barrels daily.

It will require 45 days to complete all these pipe line ventures but 10 more days should see pipe line capacity up to 150,000 barrels daily. A month will bring it to 200,000 rated capacity.

Conditions at Seminole City are evidence of the fact that the pool has literally run away with the industry. The pool is within 100 miles of the several major trunk pipe lines serving the Mid-Continent. Most of them had lateral lines even closer. Still production has come up so quickly that it has been impossible to get lines built to take care of flowing wells.

Monday of this week the Seminole area produced 119,000 barrels. Pipe line outlet is between 90,000 and 100,000 barrels. Tankage is taking care of most of the difference but some oil is being lost most every day.

Reports of oil flowing into creeks, although amounts have been small compared with total output, led the Corporation Commission to announce the special hearing in Tulsa. It is intimated that the state body may order production curtailed by pinching in wells and have runs by pipe lines prorated.

Pipe Lines Building

Should an order be formulated by the Corporation Commission, its effect will be felt for only a short time, for pipe line facilities are being completed as rapidly as is humanly possible.

The Oklahoma Pipe Line Company has one six-inch and two four-inch lines completed. Another six-inch line will be running oil within 10 days. An eight-inch line will be ready at the end of 30 days. These five will give this concern rated capacity of 50,000 barrels daily.

The Prairie Pipe Line Company has two six-inch lines complete and is running 20,000 barrels daily. Another pump station to be completed next week will bring runs in these two lines to 30,000 daily. In addition the Prairie has started an eight-inch line from Searight to Seminole, which will add another 20,000 barrels within 45 days, giving the Prairie 50,000 barrels daily.

Gulf Pipe Line Company has one four-inch and one eight-inch line complete and is running 20,000 barrels now. When another pump station is completed their capacity will be 30,000 barrels daily.

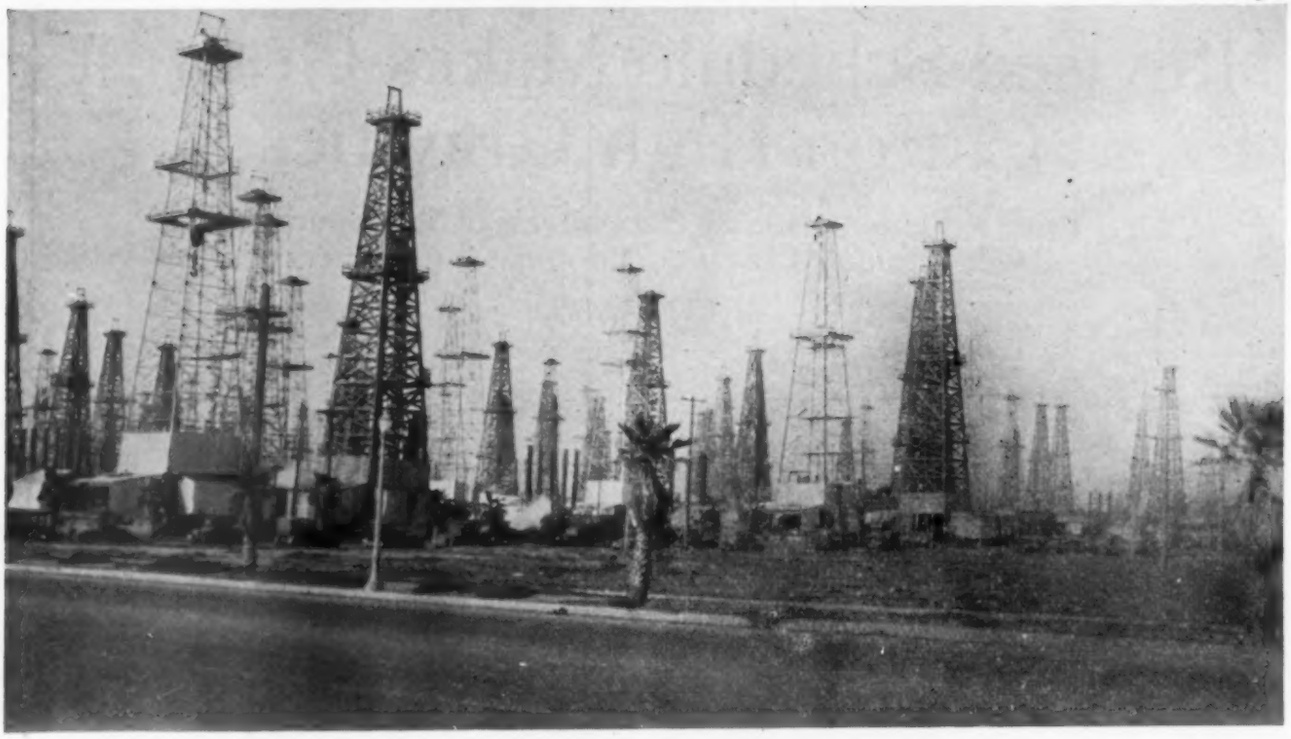
Magnolia Pipe Line Company has one six-inch line running 15,000 barrels daily and is laying a second six-inch line to boost runs to 30,000 daily. Sinclair has three four-inch lines running 5000 barrels each, 15,000 daily.

Ozark Pipe Line Company is laying a six-inch line. Its capacity will be 15,000 barrels daily.

Barnsdall Oil Corporation is laying a six-inch line from the field to Okmulgee, to have 15,000 barrels daily capacity.

Tidal has just completed a four-inch

(Continued on page 46.)



View of Huntington Beach townsite field. The line of derricks in the foreground are just inside the boundry line—17th Street. In this forest of wood and steel there are from 8 to 12 and occassionally more, derricks per city block. Huntington Beach is voting November 10th, whether this condition shall exist all over the city, or from 17th Street through five more blocks to 12th Street, or stop just where it is. Homes formerly in the vacant foreground were moved out in anticipation of further development.

California Production to Continue Upward Trend

Huntington Beach and Ventura Avenue principals in expected gradual increase for next few months

By GEORGE REID
Staff Representative

Los Angeles, Calif.—There is little doubt but that California production will continue in its present upward swing until after the first of the coming year. It will be recalled that California was producing 597,500 barrels on September 27, according to American Petroleum Institute estimate. During the last four-week period the production curve has been slowly climbing at the rate of over 3000 barrels weekly. American Petroleum Institute estimates for October 27 quotes 618,900 barrels.

The areas directly responsible for this increase in production are Huntington Beach townsite and Ventura Avenue.

Huntington Beach

Oil company statisticians have so far ventured no prediction as to the ultimate yield of the Huntington Beach newly opened area and in view of the fact that production is now around 25,000 barrels daily, after less than three months development, and taking into consideration the great number of operations underway, it becomes exceedingly difficult to estimate the production of this small area. Then again there is the possibility of opening up the area lying between Seventeenth Street and Twelfth Street, at Huntington Beach, which, it is certain, will result in another mad scramble for production, if opened. This matter comes up before the people of the city early in November for decision. The sandy beach and ocean front is at present protected against the encroachment of the oil derrick, but certain steps have been taken toward effecting a release from the legal entanglements and open this strip also for oil operations. Huntington Beach in fact, is voting a second proposition which involves the removal of drilling restrictions all over the townsite.

Ventura

Ventura Avenue is contributing about 50,000 barrels of oil toward the bolstering of California production, and conditions of operations in this territory are prophetic of perhaps 75,000 barrels by January 1, 1927.

The Ventura Avenue area is blessed with big producers from the 6000-foot level, and operators are drilling with all speed for the big stuff. About 20 operations in this area are in some stage of development below the 5000-foot level. Conservative estimates agree that at least 15 of these wells will be in the producer class by the first of the year. It is safe to state that after the first of the year Ventura will continue to increase in production for some time.

Seal Beach

Seal Beach, the home of Marland's wonder well, has settled all doubts as to its being an oil field. The producing fraternity in the Los Angeles Basin were anxious when Marland Oil Company's second and third wells passed below the pay level at 4227 feet as found in Bixby 2. The news that Bixby 3 and 4 had found the oil sand at 4393 and 4406 feet respectively, early Monday morning October 25, was gladly received by many interested operators. Producers admit that a new oil field is not essential in the Basin area at present, but so much money has been spent at Seal Beach in drilling about 18 dusters during the last score of years, that the least indication of the failure of further operations there was conducive to many gloomy viewpoints. Marland has one other well working on the Selover tract at Seal Beach, while Standard Oil Company has one well drilling and two rigged up. Standard's working well should

find the pay at any time as it is working around 4260 feet. The Associated Oil Company is drilling one Seal Beach well, Bryant No. 1, down to 1200 feet in hard sandy shale. Four wells, however, should be producing at Seal Beach within a few days perhaps, and if they assume the proportions of Marland's well (1800 barrels) then Seal Beach will contribute to a further increase in California production.

The three areas mentioned in the foregoing discussion may be considered as the sources of the expected increase in California production. Most of the older fields in the Los Angeles Basin show no inclination to effect the rising tendency of the production curve.

The old field at Huntington Beach shows little change in production during the last four months and is still variously estimated at 43,000 to 44,000 barrels. There are now seven or eight drilling operations under way. The California Petroleum Corporation seems to have developed an extension of the old field about a mile northward in the drilling of its Nos. 1 and 2 Buck. Development of the inter-lying area is not expected to influence this year's production to any extent.

Long Beach and Los Cerritos

Long Beach and Los Cerritos are producing around 85,500 and 10,250 barrels respectively. These two fields have more or less held their own, during the last three months, but they are placed in the list of fields which are expected to show early decreases in production. Both areas are scenes of activity with many new wells drilling and a great number of recompletions in order. Hope of a third sand has been definitely given up by the majority of operators in the field. There are about 40 operations under way in the area but as the wells are all small when completed it is not expected that the new wells will offset the natural decline of the field. The application of gas lift methods to many wells in the field has probably been of assistance in keeping production figures up to the present level.

Athens-Rosecrans

The Athens-Rosecrans district contributed a few hundred barrels increase during the last two weeks, but this is of a temporary nature. The field produces, probably, the highest gravity oil in the Los Angeles Basin, with an excellent gasoline content, but produces only around 14,000 barrels per day. Two completions last week caused the temporary look up in daily production. There are only 10 active operations in the field.

Baldwin Hills-Inglewood

Baldwin Hills-Inglewood is listed for decrease. Production has been decreasing steadily over the last year. The field is producing around 41,000 barrels, and there is nothing to indicate that further decrease may be fore-stalled.

Dominguez

The Dominguez field, which reached the 20,000 barrel level in its natural decline some eight months ago and has hung around that mark consistently, is pointed to as probably a source of additional production. The Union Oil Company has decided that its Callender lease is worthy of further development and has started three new wells. Union has four operations under way, all of which are in the oil sand. Shell Company of California is also doing some development work on its Reyes property.

Torrance

Chanslor-Canfield, Midway Oil Company continues to maintain their record of a well a week on their Del Amo property at Torrance, and in so doing this company contributes much to the maintenance of daily production for the field. Torrance pool production curve has been flattening out for some months, and no appreciable decrease is expected from this field. Quite a number of Torrance wells are operating under gas lift systems, especially those of E. J. Miley Oil Company, and a few on the C. C. M. O. property.

Santa Fe Springs

Santa Fe Springs is another old field famous for its many sands and remarkable production which is expected to show further decrease before the end of the year. The decrease in production has been more gradual at Santa Fe Springs during the last few months than it was before, due to some new activity and to some successful installations of the gas lift. A few operators who passed up the upper sands in their rush three or four years ago, for the deeper pay, are now drilling shallow sand wells. Standard Oil has finished drilling its No. 19 South Whittier lease well at a depth of 3911 feet. The first cement job was not a success and the well is now standing recemented. It is understood that if this well appears profitable, the Standard will stake several more locations. Not enough work along these lines, however, can be done this year to influence the total of State production. The best that can be hoped for Santa Fe Springs is that it will hold its own.

Montebello

Montebello, which has never been a big field in production figures, but has been a constant factor for years at figures varying from 12,000 to 18,000 barrels, is still producing at the latter figure. There is some possibility of extending the field since the Standard Oil Company found oil in its Benedictine No. 1 at 3603 feet. There are four operations under way at Montebello with two new rigs about ready to start drilling. This small field will hold its own in the next few months, but should show no material increase.

Brea-Richfield

The Brea-Richfield area is attracting more attention from oil operators than any of the older producing territories. There are 191 wells producing about 18,000 barrels in this territory, but there is much new development work, redrilling and deepening of wells. In the last few days operators at Richfield were surprised by the completion of the Nugent Oil Company's Damon No. 1, a well drilled in, out-lying territory and surrounded by five dry holes, produced 250 barrels the first 24 hours. Nugent is preparing to drill its second well on the lease. In the area covered there are 35 drilling operations under way, some of which are redrillers, but most of them are new wells. This is the district which boasts of the world's deepest rotary drilled, electric powered, well,—or actually the deepest man made hole in the world,—Olinda 96, now standing at 8046 feet waiting on two-inch drill pipe. C. C. M. O. expects to drill this hole some deeper, but wisely neglects to state how much.

Wildcats

A resume of the wildcat activities in Southern California indicates a total number of 53 operations of which 17 are reported as standing idle. There is, however, nothing of importance at this writing in the list of wildcats with the exception of the Associated Oil Company's Cypress well. This well was tested at its recent reported depth of 4040 feet but it is understood that nothing of importance was shown. The Associated is now drilling ahead. Prior to the test the well checked up quite favorably and operators were enthusiastic, but the failure to get showings when tested again places the operation in the uncertain class.

Other Fields

The remaining fields in the Los Angeles Basin, such as Los Angeles, Newport, Coyote and Salt Lake and including Newhall and Ventura County need not be considered in this report. The Northern California fields such as McKittrick, Elk Hills, Midway-Sunset, Kern River, Belridge, Lost Hills, Coalinga and Summerland are all classified with those fields that will show no material increase in production before the first of the year. The newly opened area of Poso Creek where two small producers have been completed, is not expected to contribute more than one or two additional wells this year.

The expected increase in California production should, as previously stated, come mostly from the three important districts of Huntington Beach townsite, Seal Beach, and Ventura Avenue. California production as of January 1, 1926, was 615,147 barrels and most oil company statisticians are satisfied to estimate a similar production at the end of 1926. A few predictions carry the estimate at from 630,000 to 640,000, but these are the exception rather than the rule. It is a foregone conclusion and generally conceded that the State's production will show a few thousand barrels increase before the end of the year, but there is nothing that points to any particularly disturbing factors along these lines. However, there seems to be no tendency upon the part of any companies to invoke any restrictive measures toward either the curbing of the present drilling rate or the shutting in of additional wells.

California production therefore, seems destined to assume a gradual upward raise for the next few months.

Progress in Waste Elimination in the Production of Oil

By PAUL L. GUARIN
*Roxana Petroleum Corporation**

TO identify and schedule the outstanding problems of waste elimination in the production of oil is no mean task; and yet, no service is perhaps more needed.

If progress along these lines is to be made, problems must be studied, and in order to be studied they must first be recognized. New knowledge in physics, chemistry, and mathematics is being developed continuously. New economic and social requirements are imposing themselves with each passing year. The engineer must apply this new knowledge to the conditions of his problems and apply the results in the light of the economic and social requirements of the day. In no field of engineering is the opportunity for work along such helpful and progressive lines greater than in that of the oil industry.

The report of the American Petroleum Institute to the Federal Oil Conservation Board, which was presented by Mr. Hughes, tends to minimize the magnitude of waste in the production of oil. At least one member of the industry has taken violent exception to some of the statements made in that report. With the present demand for petroleum and especially for its lighter products, it is plainly the duty of oil operators to protect the oil and gas in every way possible against losses. If methods of waste elimination are judiciously applied they will result, not only in the conservation of a valuable natural resource, but also in increased profits to the operators.

During a recent conversation with a prominent petroleum engineer he stated that in his opinion the greatest single loss suffered by the oil industry today is that of evaporation of oil vapors into the atmosphere. It must be admitted that this constitutes a very large and important loss, and one that must be given a great deal of attention. However, there are other wastes occurring that are of even greater importance from the standpoint of the operator. I refer specifically to unnecessarily high exploration, development, and operating costs.

Waste in Exploration Work

Much progress has been made along the lines of more scientific exploration work. During recent years more attention has been given to geology, because the operators have found by experience that it is a paying proposition. Some operators still profess to have no faith in geology and will not hire a geologist, but it will be noted in most cases of this sort that they do believe in other peoples' geology, and purchase their leases accordingly. More recently the sub-surface geologist has made his appearance, and correlation on the basis of sub-surface information obtained by core drills and small portable rotary rigs has added its contribution toward the more scientific location of expensive deep tests. In some districts considerable success has been obtained with mechanical and electrical devices in determining underground structures. Recognition must be given to these advancements made by the geologists in reducing the waste incurred by the drilling of expensive test holes improperly located.

In the actual drilling work still further waste eliminations have been made. The use of gasoline motors for furnishing power to drive both cable-tool and rotary rigs have reduced the cost of test holes tremendously in localities where fuel oil and water can be obtained only at very high cost due to the distance and character of the terrain over which it must be transported. This is particularly true in exploration work conducted in foreign countries. On one particularly inaccessible location in Venezuela the Sun Company had a rotary drilling rig equipped with two boilers and fired with wood which was cut in the jungle and hauled to the location on burrows. Accurate cost records showed that it was costing in the neighborhood of one hundred and fifty dollars per day to supply this rig with wood fuel. The estimated cost of fuel oil was about three hundred dollars per day, while it was estimated that if this rig had been equipped with gasoline motors their fuel cost would have been about seventy-five dollars per day.

I think it can be properly considered a waste of time and money to drill a test hole in which essential sub-surface information is not obtained. This waste can be reduced by the careful selection of the drilling organization that is to carry on the work. This is of particular importance where the work is to be done by the rotary method. By this I do not mean that accurate drilling cannot be done with the rotary, but merely that precaution should be taken to see that the tool pushers and drillers employed are capable of distinguishing the different formations as they pass through them, and to make sure that they have had sufficient experience in core drilling to obtain good solid cores without burning them. It is necessary that these men be conscientious and take sufficient interest in their work to collect and properly label washed-up ditch samples, and to obtain a good core of all sands and lime formations as soon as possible after drilling into such formations.

Waste in Development

Insufficient Planning.—High costs of development are due in a large measure to insufficient planning. We all realize, in this day of highly competitive development, that speed is a very important factor, but I believe that, just as any particular gas engine develops its best fuel economy at a certain speed range, so is there a best economical operating speed for any particular development campaign. Low operating speeds will result in loss of flush production, and operating speeds above the economical limit will result in excessive costs not justified by the increased flush production obtained. To determine the most economical operating speed, knowledge of the advantages to be gained in gross production by increased speed is essential. The average field superintendent can hardly be expected to have this knowledge, and if simplified reports of the geologists were made available for his use a more economical operating speed would result. There are cases when break-neck operating speeds—hole-at-any-cost methods of development are justifiable. We hear much about the application of back pressure, etc., but where wells are located near the edge of a structure and heavy encroachment of water is impeding, speed of getting the wells down and methods of open flow production to get the maximum amount of oil possible in the shortest length of time may mean the difference between profit and loss on these particular locations. At Wortham, fairly accurate estimates of the possible magnitude of the field and data on water encroachment were available while the boom was still in progress. George Sawtelle, of the Kirby Petroleum Company, during the time of the greatest rush at Corsicana, made an estimate of the fields' future production six months from that time, which later proved to be accurate within a few thousand barrels. Upon the knowledge of future quantities of oil and water to be handled depends the intelligent selection of proper and most economical pumping and flowing equipment.

Water Systems.—In planning water systems some idea of the possible magnitude of the companies' development program is essential. If an estimate can be given of the possible number of drilling rigs that might have to be furnished with water at one time, and where these leases are located, it is a simple matter to lay out a water system of sufficient capacity to supply the drilling well and station requirements. If water in the

*Delivered before Mid-Continent Section of American Association of Mechanical Engineers, Tulsa, October 30, 1926.

needed quantity is not conveniently available, the proper steps can be taken immediately to obtain a larger source of supply, or limit the operations so that the water requirement will be within the amount available. This is quite contrary to the usual practice. I have seen cases where oil companies have made locations and awarded contracts for drilling of as as many as four wells with only one two-inch (2") water line laid and two or three six horse power gasoline pumps at the water stations. A rotary rig drilling in soft formation will use 1,000 barrels of water daily, or more.

Location of Equipment—In addition to the water system, well planned lease equipment layouts can be made where tank batteries, flow tanks, boiler stations, etc., are most suitably located, with due consideration of fire hazard. It is difficult for the superintendent to most suitably locate this equipment, with the pressure of other matters on his mind, without the aid of maps and sufficient thought given to the matter. As the situation now stands in many cases the equipment is placed in a hurry, lines laid in every conceivable manner, and the equipment map is drawn up later by some engineer, to conform to the way the equipment is actually placed. In cases of this sort it is often necessary to re-arrange part of the equipment later, at an expense which can properly be termed "waste." The operators should co-ordinate these various functions by the application of engineering methods, namely, the collection and analysis of facts and estimates relating to the problem, planning of the work relating to the various acitvities, selecting the most suitable material and equipment, and developing a balanced routine for carrying out these co-ordinated activities.

Storage Facilities—Some years ago methods of flowing wells into earthen storage and open tanks was common practice. The losses resulting from such methods, both in loss of oil into the ground, and due to evaporation, and consequently reduction in gravity of the oil, are self-evident. Even at the present time, in isolated cases, we find such conditions existing. Much progress has been made in eliminating this waste; open wooden tanks first appeared, and later covered, bolted steel tanks became prominent. Occasionally, when "wildcats" become producers, the amount of oil obtained is often in excess of the storage available. In cases of this sort, where it is impossible to control the well, it is often necessary to flow into earthen tanks until adequate facilities for storing and handling the oil can be obtained. However, in proven territories where some estimate of the well's probable production can be made, we sometimes find conditions under which wells are brought in with inadequate storage and methods of flowing into open earthen tanks are used. It has been necessary for the oil and gas commissioner of Texas to place a heavy fine on operators in the Panhandle district who bring in wells without sufficient storage available. A striking instance of this unnecessary waste appeared in last evening's paper, in which it was reported that 10,000 barrels of high gravity oil was running onto the ground and wasting down the ravines at Seminole. This is a concrete example of insufficient planning on the part of the production men, as figures on production and available storage and pipe line capacity could have been easily obtained. The application of methods of increased back pressure and reduced flow would no doubt soon bring the production under control.

Over Production—While over production cannot be classified as waste if properly handled and run to storage, it causes deflation of the price of crude oil, not only in the district in which the overproduction is obtained, but throughout the entire system, resulting in serious losses to the industry as a whole.

In new flush fields which threaten to break the market there is need for better co-operation among the operators. Application of equitable methods of controlled flow and economical speed of development will result in mutual benefits, both to themselves in the way of lower development costs and better drilled holes, and to the producers in other districts, by helping to stabilize the price of crude.

Saving of Flush Gas—Very large savings of flush gas have been made by the use of gas traps or oil and gas separators, which are used in place of flow tanks. Where flow tanks are used the gas produced by the oil is allowed to escape into the atmosphere, carrying with it much entrained oil. By use of gas traps, clean separation of the oil and gas is accomplished under pressure, and this gas, which otherwise would have escaped at over one pound pressure, is saved and can be utilized for lease-hold purposes at sufficient pressure for distribution. By means of the gas trap sufficient pressure can be maintained to deliver the gas to portable gasoline plants for the extraction of its natural gasoline content.

Extraction of Natural Gasoline From Flush Gas.—In the past the gasoline content of the flush gas of new fields was wasted until the permanent gasoline plants were erected. Because of the large investment involved, the erection of these plants was often delayed until a reliable estimate of the field's future production could be made. The production of natural gasoline for the first six months of

Tulsa Engineering Society Discusses Elimination Of Waste in Field

Tulsa, Okla.—The place of the mechanical engineer in the effort to overcome waste in producing crude oil was brought before the industry at the fall meeting of the Mid-Continent section of the American Society of Mechanical Engineers, here October 28 and 29. The second night of the whole program was devoted to this subject—"Progress in Waste Elimination in the Production of Crude Oil."

The paper, printed elsewhere in this issue of THE OIL WEEKLY, was presented by Paul Gaurin of the Roxana Petroleum Corporation. Free discussion of the subject followed.

Elimination of waste in exploration was discussed by John M. Lovejoy of the Amerada Petroleum Corporation. He offered the opinion that geology has contributed more to the elimination of waste in exploration than any other effort. He cited the condition which requires the drilling of some dry holes to determine the extent of a structure. The work of the geologist serves to reduce the number of dry holes necessary for outlining the boundaries of a structure.

Further he brought out that wildcatting is done by one concern or individual blocking acreage. In turn this concern or individual sells acreage from the block, retaining sufficient acreage for its own requirements. Since the block is acquired on geology and parts of it is sold on geology, the geologist serves to allow a company to restrict and determine its own wildcatting expense.

Mr. Lovejoy stated that there has been and still is waste in the use of scouts. Much of the routine work done by scouts is duplication and to some extent waste. He suggested that scouts should be required to do land work. Small concerns, he said, should not attempt general scouting.

Hollis P. Porter of the Gypsy Oil Company discussed "Flow of Wells by Natural and Artificial Means." His remarks were to the effect that wells should be kept under control from the day of completion.

That much improper and unnecessary equipment is bought for the oil fields was the statement of Glenver McConnell of the Roxana Petroleum Corporation. "We should endeavor to obtain cost data, field data and other engineering data, for guidance in selecting equipment," he said. "Scientific methods should be formulated for the selection of materials and equipment."

In discussing waste through evaporation, Ludwig Schmidt of the United State Bureau of Mines offered data to show that almost nine per cent of the crude oil produced in the United States is lost in the air. This loss occurs from the bringing of crude oil to the surface until its distribution as refined products.

His figures for 1925 were 17,286,000 barrels of the total production of the year were lost. This is 8.6 per cent.

The meeting in Tulsa was divided into two divisions. The program of the first night was devoted to waste in refining.

1926, as compared with a similar period of 1925, increased 25.2 per cent, in the face of a drop of crude production of some 15,000,000 barrels for the same period. This increase in natural gasoline from the flush gas by the use of portable gasoline plants, from which it may be seen to what extent this type of plant has reduced the waste of natural gasoline formerly suffered by the industry. The best application of the portable plants are in new fields where well pressure, by means of the gas trap, can be utilized for passing the gas through the absorber, and where the gathering systems are limited. It is conservatively estimated that all the portable plants in the Mid-Continent area are producing an average of from 2500 to 3000 gallons of gasoline per day, while one portable plant of 2000 gallons rated capacity, owned by the Roxana Petroleum Corporation, has produced in excess of 8000 gallons per day.

Waste in Operation

Standardization—Perhaps the greatest single co-operative advancement in the elimination of waste made by the Oil Industry has been the work that the American Petroleum Institute has accomplished on the standardization of oil field equipment. Complete specifications have been adopted, or in some cases tentatively adopted, on the following material:

Steel and iron pipe for oil country tubular goods.
Oil field belting.
Sucker rods.
Standard rigs and derricks.
Rig irons.
Cable drilling tool joints.
Oil field boilers.
Rotary drilling equipment.
Wire rope.
Manila cordage.
Standard size bolt circle and holes for flange connections between the clutches and gas engines.

The work of several of the Standardization Committees cannot be completed until additional tests and research work have been concluded. Funds have been appropriated for this purpose, and allotments are being made to the various committees for carrying on this work.

Standardization is always one of the first steps in waste elimination, and it has been estimated among engineers and field men that savings through standardization may extend to 25 per cent, instead of 15 per cent, as estimated at a recent meeting of the American Petroleum Institute.

Selection of Equipment—One of the outstanding wastes in the production of oil is the purchasing of improper equipment. The saving which could be effected by the careful selection of material and equipment, based upon the recommendations of engineers who have thoroughly studied the conditions involved, are enormous.

More thought is being given to the portability and high salvage value of equipment purchased. Notable progress along this line has been made, as evidenced by the increasing use of such equipment as portable gasoline plants, portable mounted motor driven water pumping outfits, portable power units, portable compressor layouts, portable houses and buildings, steel derricks, steel rig machinery, etc.

Evaporation Losses—Evaporation losses from crude oil and petroleum products in field storage and during transportation to the refinery have been shown in some cases to be as large as four or five per cent. However, these figures are usually based on storage facilities open to the atmosphere.

Any program to reduce evaporation losses from produced crude oil should be carried out through the whole system, from the well to the refinery. There is little advantage in saving the wild gases in a 43 degree gravity oil in field stock tanks, when it is later to be pumped into 55,000-barrel or 80,000-barrel storage tanks, subject to evaporation through extremely low pressure vents. One serious difficulty to a satisfactory solution of the problem is the lack of reliable high capacity pressure relief valves and good reliable vacuum breaks.

There are also economics involved as to just what extent it pays to save the vapors. At the present time it seems that gas tight tanks equipped with three or four-ounce low pressure relief valves, is the best practice for economy. Another difficulty is in getting the field superintendent to insist upon the men staying off the tops of the tanks, and upon keeping the vents and openings closed at all times, except when gauging.

Stablization of Crude Oil—To hold the lighter fractions in a medium or high gravity crude oil, as explained before, is a difficult and expensive proposition. These gases must not only be retained in the stock tanks on the lease, but throughout the entire system. On account of the large surface area of the tops of 55,000-barrel storage tanks it is not possible to carry over one-half pound vapor pressure. Some progress has been made along the line of stablizing the crude oil to be transported to the refinery, or to storage, by removing a cut of the lighter fractions, vaporized at a temperature of from 90 to 120 degrees. The vapors so removed are compressed to a pressure of from 40 to 60 pounds and condensed into gasoline. This gasoline is then blended with the casinghead gasoline, which results in a more stable condition of the natural gasoline. This gasoline can then be transported by higher class vapor-tight facilities.

The Anglo-Persian Oil Company has found that their evaporation losses from the loading point to their refineries over a period of years, has amounted to 3 per cent. They are shipping in the neighborhood of 34,000 barrels of 37 degree gravity crude oil per day. They have recently installed a crude stabilizing process, consisting of passing the crude oil through a heat exchange in which temperature of the oil is raised to 110 degrees F. The crude is then admitted near the top of a tower filled with grids which have a large total surface area. The oil gravities down through the grids and is drawn off near the bottom in a stablized condition. The gases are withdrawn from the top of the tower under vaccuum, compressed, and then condensed into gasoline which is used for blending purposes at the refinery. In this installation the Anglo-Persian Oil Company is removing a 5 per cent cut.

In the future we may expect to see applications of crude stabilizing processes in the United States, by companies who produce, transport, and refine their own crude production as a means of eliminating waste due to evaporation.

Waste in Treating Emulsions, or Cut Oil—D. B. Dow of the Bureau of Mines, claims that 20 per cent of the oil produced in Mid-Continent and Gulf Coast districts are emulisfied and require treatment before marketing. While this figure appears to be a little high, there is no doubt that the treatment of oil emulsions is one of the technical problems which the producers must face, and one in which the percentage of waste is often very high. At first the formation of cut oil was looked upon as a necessary evil, and the emulsions were run to waste, either in sumps or into streams. Laws were invoked to prevent the pollution of the streams and the disposal of these emulsions became quite a problem. The usual practice was to drain it into sumps and then the accumulation of cut oil was burned. It was noticed that a layer of good oil would separate on top of the sump and efforts were made to skim off and save this oil. Better understanding of the character of these emulsions has resulted in much progress in their treatment, until now it is possible to treat almost any kind of a cut oil at a cost low enough to make a profit for the producer.

Cut oil contains water, both in a state of suspension, and as an emulsion, and when the cut oil is allowed to stand the water held in suspension will settle to the bottom. The emulsions, however, are usually very stable, and will stand for indefinite periods of time.

One of the first steps to be taken in order to reduce emulsions is to try to effect a water shut-off by plugging back, or by the use of other methods. The use of gas traps to hold back pressure, to effect separation of oil, gas, and water above the ground before the pressure is released, has resulted in many cases in the reduction of cut oil produced. The method adopted for the treatment of cut oil on any property depends largely upon the total cost and character of oil emulsion to be treated. The following are the methods now most commonly used:

1. Settling.
2. Heating.
3. Chemical Treating.
4. Electrical Precipitation, or Dehydration.
5. Centrifugal Dehydration.

1. The settling process results in the separation of the product into three layers: free oil on top, free water on the bottom, and a layer of emulsion between the two. Since only the water held in suspension is settled out, the emulsion has never been attacked.

2. Heat decreases the viscosity of the oil and thus decreases the frictional re-

(Continued on page 48.)

Texas Division Plans Technical Meeting for Field Men

Association re-elects officers and names committeemen at Dallas meeting

By H. H. KING
Staff Representative

Dallas, Texas—Preliminary steps were taken at the eighth annual convention of the Texas division of the Mid-Continent Oil & Gas Association for the holding of a meeting somewhere in the State next spring for field men to take part in a technical program dealing with improved drilling and production methods. The annual meeting of the Texas division was held in Dallas, October 29, at which time all officers were re-elected, with three new vice-presidents added, while the number of directors, or executive-committeemen, was increased from 54 to 68. The idea of sponsoring a special technical meeting for field men resulted from the highly successful program put over October 11 and 12 in Tulsa, when the Oklahoma-Kansas division of the Mid-Continent Oil & Gas Association and the Petroleum Division of the American Institute of Mining and Metallurgical Engineers met jointly and brought forth a wealth of valuable information on oil recovery and drilling methods.

J. D. Collett, independent operator of Fort Worth, was re-elected president of the Texas division, and the following new vice-presidents were added: Roy B. Jones, Panhandle Refining Company, Wichita Falls; Paul Gage, Dallas, and Adrian Moore, Houston. The re-elected vice-presidents are: W. B. Pyron, Gulf Production Company, Houston; W. B. Hamilton, Wichita Falls; R. S. Haseltine, Guiberson Corporation, Dallas, and J. C. Wilson, Wilson-Broach Company, Beaumont. W. M. Massie, Fort Worth, and Joe P. Laney, Dallas, were re-elected treasurer and secretary, respectively.

Rapid strides being attained by the State of Texas in regaining the lead as the largest producing state were traced by J. D. Collett, president, in a talk made at the morning business session. Collett also commented on the excellent conditions experienced by the oil producing branch of the industry during the present year, and was outspoken against the new gasoline tax law that was proposed and failed at the last meeting of the Texas legislature.

Carl Young, who has charge of the A. P. I.'s Standardization Division offices at Dallas, read a paper that reviewed the standardization work to date, and recommended that the oil companies and operators begin adopting the standardized equipment, as sufficient manufacturers are turning out products bearing the A. P. I. stamp to make same available in most every field. Young also stated that the A. P. I. is launching an educational campaign among the field men on the proper care and handling of A. P. I. equipment in order to obtain the maximum of service.

Nominating Committee

The election of directors for the Texas Division was facilitated by the appointment of Edgar Pew, J. S. Bridwell and Harry Morlang as a committee to nominate the candidates, and their recommendations were later approved by a unanimous vote. The directors elected the officers of the division for the ensuing year at a meeting held after the morning business session.

Technical Meeting Planned

Considerable interest was aroused during the morning session among the membership over the possibilities of staging a technical meeting for field men at a central point in the State next March or April. Mr. Collett expressed his views on the good that was accomplished at the Tulsa meeting, and an open discussion revealed that the majority were in favor of such a meeting and to limit same to Texas' fields. John R. Suman suggested that a two-day meeting be held, with one entire day given over to safety matters, while the balance of the program would be filled by a series of

Kansas-Oklahoma Division Names Officers And Committee Members

Tulsa, Oklahoma.—Henry McGraw, vice president of the Gypsy Oil Company, was elected president of the Kansas-Oklahoma division of the Mid-Continent Oil & Gas Association here October 26. He has been connected with the organization since its formation in 1917.

Other officials chosen are Lee Scott, White Eagle Oil & Refining Company, Wichita, Kansas, first vice-president: A. M. Landon, Independent, vice-president for Kansas; Wirt Franklin, Ardmore, vice-president for Southern Oklahoma; John Kane, Phillips Petroleum Company, Bartlesville, vice-president for Northern Oklahoma; Harry H. Smith, Tulsa, secretary-treasurer.

The following were chosen to represent the Kansas-Oklahoma division on the executive committee of the general Mid-Continent Oil & Gas Association:

Burdette Blue, Indian Territory Illuminating Oil Company, Bartlesville; Louis Campbell, Magnolia Petroleum Company, Oklahoma City; Frank Buttram, Oklahoma City; H. N. Cole, Pure Oil Company; Burt H. Collins, Echo Oil Company; Wm. N. Davis, Phillips Petroleum Company; J. C. Denton, Mid-Continent Petroleum Corporation, Tulsa; A. L. Derby, Derby Oil Company, Wichita; W. W. Fleming, Mid-Kansas Oil & Gas Company, Tulsa; W. C. Franklin, Tidal Oil Company, Tulsa; Wirt Franklin, Ardmore; John S. Griffin, Sr., Griffin Production Company, Tulsa; J. H. Hill, The Texas Company, Tulsa; John H. Kane, Phillips Petroleum Company, Bartlesville; Dana H. Kelsey, Prairie Oil & Gas Company, Independence; W. L. Kistler, Kistler Petroleum Company, Tulsa; A. M. Landon, Independence; John M. Lovejoy, Amerada Petroleum Corporation, Tulsa; Henry McGraw, Gypsy Oil Company, Tulsa; John H. Markham, Jr., Tulsa; E. W. Marland, Marland Companies, Ponca City; P. M. Miskell, Empire Refineries, Tulsa; E. H. Moore, Independent Oil & Gas Company, Tulsa; R. H. Bradford, Eldorado; Waite Phillips, The Philmack Company, Tulsa; E. B. Reeser, Barnsdall Oil Company, Tulsa; G. S. Rollin, Roxana Petroleum Corporation, Tulsa; Lee Scott, White Eagle Oil & Refining Company, Wichita; J. J. Shea, Tulsa; W. G. Skelly, Skelly Oil Company, Tulsa; H. R. Straight, Empire Companies, Bartlesville; James A. Veasey, Carter Oil Company, Tulsa; P. G. Walker, Jr., Tulsa; W. E. Wood, Kingwood Oil Company, Okmulgee; C. J. Wrightsman, Wrightsman Oil Company, Tulsa; Harry H. Smith, Mid-Continent Oil & Gas Association, and R. A. Griffith, Sinclair Oil & Gas Company, Tulsa.

lectures and papers. Roy B. Jones outlined the advantages of having local meetings to avoid long trips by the field men and unnecessary loss of time from work. R. S. Haseltine spoke on his experience in California fields, where such meetings are held, and the excellent results obtained. The open discussion revealed that some dissension prevailed as to whether the proposed technical meeting should be held in conjunction with the A. P. I. or A. I. M. M. E., and a committee is to be appointed later by the officers of the Texas division to go further into the matter before a meeting place and date is selected.

A committee consisting of W. B. Francis, Frank Cullinan and Edgar Pew were appointed to draw up resolutions expressing the regrets of the Association of the recent deaths of A. B. Steen of The Texas Company and Fred B. Tough, production manager for the Humphreys Corporation.

Visiting members were the guests of Dallas oil men and supply houses at a golf tournament in the afternoon, and Frank Cullinan, vice president of the Republic Production Co., won the trophy donated by W. B. Hamilton. The visitors were entertained in the evening with a banquet at the Adolphus Hotel, and short addresses were made by G. Clint Wood, veteran oil producer, and Lieutenant Governor Barry Miller. Judge H. A. Bell, chief supervisor of the oil and gas division of the Texas Railroad Commission and Ex-Senator H. P. Brelsford, who is now council for Prairie Oil & Gas Company at Eastland, also spoke.

Directors Elected

K. C. Baker, United North & South Development Company, Luling; E. H. Blum, Atlantic Oil Producing Company, Dallas; J. S. Bridwell, Wichita Falls; Bert Broday, Humble Oil & Refining Co., Wichita Falls; Lee Bivins, Amarillo; E. H. Buckner, Houston Oil Company, Houston; A. I. Brainard, Frick-Reid Supply Company, Houston; C. C. Cartwright, National Supply Co., Fort Worth; W. D. Cline, Wichita Falls; J. D. Collett, Fort Worth; R. A. Crawford, Lone Star Gas Company, Dallas; Frank Cullinan, Republic Production Company, Dallas; John Crotty, Republic Supply Company, Houston; Jack Dies, Humble Oil & Refining Company, Houston; R. L. Dudley, Oil Weekly, Houston; Truett B. Cranfill, Cranfill Brothers Oil Company, Dallas; F. W. DeWolf, Humphreys Corporation, Houston; E. H. Eddleman, Continental Oil Company of Texas, Wichita Falls; T. J. Fitch, Magnolia Pipe Line Company, Dallas; Charles Fitzgerald, Jr., Pure Oil Pipe Line Company, Dallas; W. H. Francis, Magnolia Petroleum Company, Dallas; W. P. Gage, Dallas; I. G. Harmon, Marland Oil Company, Fort Worth; W. B. Hamilton, Wichita Falls; Harry C. Hanszen, Houston; W. M. Harrison, Star Refining & Producing Company, Fort Worth; R. S. Haseltine, Guiberson Corporation, Dallas; T. B. Hoffer, Hoffer Oil Corporation, Fort Worth; B. N. Honea, Star-Telegram, Fort Worth; J. K. Hughes, Mexia; Roy B. Jones, Panhandle Refining Company, Wichita Falls; J. A. Kemp, Wichita Falls; C. F. Kelsey, Independent Oil & Gas Co., Fort Worth; Fred M. Lege, Jr., Magnolia Gas Company, Dallas; J. F. Lucey, Lucey Pet. Co., Dallas; J. C. McCue, Texas Company, Houston; J. B. McCabe, Municipal Gas Company, Dallas; J. L. McMahon, The Texas Company, Wichita Falls; C. B. McKinney, Houston Pipe Line Company, Houston; W. M. Massie, Fort Worth National Bank, Fort Worth; W. A. Moncrief, Marland Oil Company, Fort Worth; J. M. Mouser, Prairie Oil & Gas Company, Eastland; Edward T. Moore, Simms Oil Company, Dallas; H. J. Morlang, Oil Well Supply Company, Fort Worth; W. R. Mitchell, MacPherson Construction Co., Ft. Worth; H. E. Marsh, Amerada Petroleum Corporation, Fort Worth; Adrian Moore, Rycade Oil Corporation, Houston; Underwood Nazro, Gulf Production Company, Houston; Robert R. Penn, Dallas; J. R. Penn, Texas Pacific Coal & Oil Company, Fort Worth; J. Edgar Pew, Sun Oil Company, Dallas; W. M. Priddy, American Refining Company, Wichita Falls; D. C. Proctor, Gulf Production Company, Houston; W. B. Pyron, Gulf Production Company, Houston; A. B. Smith, Pandem Oil Company, Dallas; W. B. Sutton, Vacuum Oil Company, Houston; J. D. Sandefer, Walker-Caldwell Producing Company, Breckenridge; Frank M. Smith, Oriental Oil Company, Dallas; Levi Smith, Big Lake Oil Company, Texon; John R. Suman, Rio Bravo Oil Company, Houston; B. S. SoRelle, Pure Oil Company, Mexia; F. L. Thomson, Grayburg Oil Company, San Antonio; John C. Townes, Humble Oil & Refining Company, Houston; Joseph M. Weaver, States Oil Corporation, Eastland; J. C. Wilson, Wilson-Broach Co., Beaumont; C. L. Witherspoon, Witherspoon Oil Company, San Antonio; G. Clint Wood, Wichita Falls; E. F. Woodward, Republic Production Company, Houston.

Test Deep Sand Found at Barbers Hill

Houston, Texas.—The topping of a rich oil sand at 4083 feet by the Mills Bennett Production Company in the center of its Kirby 121-acre lease on the east side of Barbers Hill salt dome has opened possibilities for the best production yet obtained from this field, and has stimulated a leasing campaign that has run acreage in the vicinity of the test to high figures.

After striking the sand penetrated the promising pay formation 15 feet, and set and cemented casing just above the top. The plug was expected to be drilled during the present week. This is the deepest sand ever encountered at Barbers Hill, and a good producer is expected. The Kirby B-2 well, in which the sand was found, is located 390 feet southeast of the Kirby B-1, abandoned in salt recently at 1788 feet. The strike in the B-2 well indicated a sharp dip in the dome between the two tests inasmuch as the low depth in the B-2 was reached without a sign of a dome.

The Gulf Production Company has secured from F. M. Bullock a block of 34 acres protection for $45,000 following the Mills Bennett discovery. This acreage is in the Griffith league about 600 feet northeast of the Kirby B-2. Sinclair has obtained approximately eight acres 800 feet southeast of the B-2 well for $300 per acre. The Texas Company has leased 22 acres about 1500 feet south of the Kirby B-2 for $2200 per acre, one-half cash and one-half to be paid in oil. Aside from these land deals D. J. Harrison, independent operator, is reported having paid $17,000 for a 1/64 royalty on the 121-acre tract on which the B-2 is located.

New Black Oil Field in Wyoming

Casper, Wyo. — Another Black oil field has been added to the many in Wyoming by the Union Oil Company of California, drilling on Gooseberry creek, section 9-46-101, Park County. The Embar sand was tapped at 2330 feet. The formation was drilled 30 feet. Oil rose several hundred feet in the hole. Drilling was continued and the test will be carried to the Tensleep, which is expected to yield even better production than the Embar. The hole is nearly half filled with oil from the first producing stratum.

Skelly Earnings Show Big Increase

Skelly Oil Company's earnings for the first nine months of 1926 were $5,021,140.30, after depletion and depreciation but before allowing for current federal income tax. This compares net earnings of $3,096,413.43 for the first nine months of 1925 and is equivalent to $5.02 per share earned on the average number (998,998) of shares outstanding during the period, as against $3.70 a share earned the first nine months of 1925. Earnings per share for corresponding periods in 1924 and 1923, respectively, were $1.23 and .09 cents.

Earnings for the month of September, 1926, reached a new high peak for the company, the net for the month totalling $792,331.44 as compared with $544,257.29 for August this year and $478,092.82 for July.

The net earnings for the quarter ended September 30, 1926, were $1,914,681.55, as compared with a net of $768,059.11 for the corresponding quarter in 1925. Both figures are after all charges but before current federal income tax.

PERSONAL MENTION-MEN YOU KNOW

Victor H. Smith, vice president of the North American Car Corporation, Chicago, sailed Wednesday, October 27, for Europe, where he will interview several foreign buyers of various American, and principally Mid-Continent, petroleum products for export. This trip is in line with the program of the company of providing additional facilities in co-operating with the refiners by way of transporting and terminaling their products.

W. K. Kirby, chief petroleum engineer for the J. G. White Engineering Corporation, New York, spent several days last week in Houston, while on a business trip through the Southwest.

J. B. Joyce, refinery superintendent for the Continental (Texhoma) Oil Company of Texas with headquarters at Wichita Falls, has resigned to take charge of the Simms Oil Company's plant at Dallas, and will also have charge of the skimming and cracking plant being constructed by the latter company at Smackover, Arkansas, when completed late this year.

C. C. Chisholm, general manager of the Haynes Stellite Company, died at Kokomo, Indiana, October 21, after an illness of one week. Mr. Chisholm was born in Nova Scotia, May 20, 1886, and spent the early part of his life in California. He has been with the Haynes Stellite Company since 1920, when he became general manager of the company at the time it was acquired by the Union Carbide and Carbon Corporation, which concern he had been with since 1915.

Roy C. Willett of the auditing deparment of The Texas Company, who until recently has been in the sales department at Dallas, has been transferred to the auditing division of the sales department of The Texas Company at Rio De Janeiro, Brazil, and will sail soon to assume duties at his new post. Mr. Willett will have supervisory control over the auditing in several of the South American branches of The Texas Company.

—Photo by Independent Press.

FREDERICK V. GORDON

who has recently been elected vice-president of the California Petroleum Company to take charge of the land and leasing operations. He has the reputation of being the largest oil land and leasing specialist in California. He has been connected with the oil industry since 1902, during which time he has covered practically every phase of the business.

Phil B. Dolman, geologist of Tulsa, has recently moved his offices and residence to San Angelo, Texas, where he will do consulting work.

C. H. Seabrook, vice president of the American Paint & Supply Company, has recently returned from an extended trip in California in the interest of the company's California business.

E. L. Roark, who has been a geologist with the Marland Oil Company for the past seven years, has resigned to accept a position as chief geologist with Jarvis & Holm, Inc.

E. L. De Golyer, president of the Amerada Petroleum Company, left Houston November 2 for New York, after a trip through the Mid-Continent territory. While in Houston he was guest of honor at a luncheon given by Wallace Pratt, chief geologist for the Humble Oil & Refining Company.

F. L. Jolly, formerly of the Humble Oil & Refining Company, is now with the Reading Steel Castings Company, covering Texas and Louisiana territory.

Miller Improved Gas Engine Company, of Springfield, Ohio, is establishing offices on the West Coast in charge of Mr. George B. Turner. at 807 San Fernando Building, Los Angeles.

P. J. Donnelly, 68 who has been actively associated with the oil development in the Mid-Continent and in the fields near his home at Marietta, Ohio, for many years, and also vice-president of the Peoples Bank & Trust Company of Marietta, died October 25 while visiting in Phoenix, Arizona, at the home of his daughter, Mrs. R. E. Anderson. The body was shipped to Marietta for burial. Besides a widow and daughter, Mr. Donnelly is survived by three sons, Walter W. Donnelly of Fort Worth, president of the Federal Supply Company; Ray Donnelly of Tulsa, and Arthur Donnelly of Mexia.

T. P. Lee, vice-president of the American Republic Corporation, headquarters in Houston, has resigned this position, effective November 1. Included among the subsidiaries and associated companies with the American Republics Corporation are: Galena Signal Oil Company, Republic Production Company, Petroleum Iron Works, Pennsylvania Car Company and Pennsylvania Tank Line Company.

C. Frank Kelsey, manager of the Texas division of the Independent Oil & Gas Company, with headquarters at Fort Worth, has been elected a vice-president of the company. Kelsey was operating in Texas as an independent prior to making connection with the Independent several years ago, and has since fortified the company with valuable producing and semi-proven acreage in the Crane-Upton County district, besides scoring shallow oil production in Archer, Shackelford and Coleman Counties.

Huntington and Ventura Increase California Output

Eight new wells at Huntington Beach average 1000 barrels each; completions between five and ten per week

By GEORGE REID
Staff Representative

Los Angeles, Calif.—Production in the Ventura Avenue field has increased 3250 barrels during the past week, due to the completion of two wells in the 6000-foot stratum. The General Petroleum Corporation contributed its Barnard No. 4-A early in the week, flowing at the rate of 2625 barrels. The depth is 5864 feet. The oil is 30.8 gravity A. P. I., with less than one per cent cut. The casing record shows 8¼-inch set at 3666 feet and 6¼-inch set at 4722. Drilling operations encountered high gas pressure from 5270 feet to the bottom of the hole and work proceeded under difficulties. Casing pressure is reported as 520 pounds and tubing pressure at 420 pounds. The second completion in this area was reported by the Shell Company of California when its Taylor No. 12 was put on production, making 830 barrels of 29.6 gravity oil from 6413 feet. While the Shell Company did not get into the gusher class with this operation they have probably what might be termed the world's deepest big well.

The Associated Oil Company has seven operations under way on its Lloyd lease at Ventura Avenue, five of them drilling below 4000 feet. Associated is scheduled for the early completion of two wells in this area, however, for its Lloyd No. 17 is working around 6240 feet and its Lloyd 32 is drilling at 6120 feet. The Ventura Avenue field is producing 53,250 barrels from 67 wells, or an average of 794 barrels per well. Of this total production 52,279 barrels is produced by 58 flowing wells. Nine wells in the field are on the pump and producing about 1000 barrels. Nine rigs are reported and 35 drilling operations under way.

Huntington Beach Increases

Huntington Beach townsite production has increased to about 30,000 barrels since last week's report. Eight new wells entering the producing class contributed about 8000 barrels of additional oil. This area, which is only about three months old now has 52 producing wells and is contributing producers at the rate of from five to 10 weekly. The Ambassador Petroleum Corporation completed its Huntington Beach No. 9 at 3937 feet. The well produced 1100 barrels the first 24 hours.

Ambassador Petroleum Corporation is drilling at 3700 feet in Huntington Beach No. 8 and has rigs up for its Huntington Beach Nos. 10 and 11.

George F. Getty's Huntington Beach No. 9 was put on production early this week yielding around 1500 barrels of 17 gravity oil through a 40/64-inch bean; casing pressure 200 pounds and tubing pressure 225 pounds. Getty's No. 9 drilled to 3900 feet.

The Julian Petroleum Corporation completed the first of its ten drilling operations and brought in its Treat No. 1 flowing 1300 barrels through a 33/64-inch bean from 3975 feet. The oil is comparatively clean and 24.5 degrees A. P. I. gravity.

The McKeon Oil Company finished its Huntington Beach No. 2 at 3990 feet and brought in a 600-barrel well.

Petroleum Securities Corporation contributed another producer this week in the completion of its Tubach No. 1 at 3990 feet, flowing 900 barrels through a 40/64-inch bean. Casing pressure reported at 190 pounds, oil gravity, 24 degrees A. P. I.

The Superior Oil Company also added a producer to its list of completions in the townsite area, which now totals six wells. Its Nixon No. 1 drilled to 3979 feet came in flowing at the rate of 555 barrels.

The Standard Oil Company now has 27 producers in the Huntington Beach townsite area, having added two wells to its producing class this week. Standard's Huntington Beach H-4 was completed at 3986 feet, flowing about 300 barrels of 21.4 gravity oil. Standard's second completion was the biggest well of the week. Its Crawford No. 1 which was drilled to 3990 feet was brought in flowing at the rate of 1700 barrels. The oil was very clean and the gravity was close to 26 degrees A. P. I.

E. J. Miley Oil Company developed some additional production when it successfully completed a re-completion operation and brought its Pacific Electric No. 1 up to 1200 barrels, from a depth of 4000 feet.

New Tests Started

Despite the congestion of town lot drilling conditions at Huntington Beach in the new townsite area there seems to be room for more wells and derricks. During the past week six new wells have been spudded in and a resume of operations in this district shows 35 rigs up ready to begin operations. The newly spudded wells are California Petroleum Corporation's Talbert No. 1; Geo. F. Getty's No. 11, drilling in sand and gravel at 425 feet. Hogan and Lytles No. 2 is also reported in sand and gravel at 330 feet; and Standard Oil Company's Huntington 14 and 15 have been drilling but a few days. Standard's Pacific Electric No. 1 on the bluff lease between the Pacific Electric railway and the ocean was spudded in during the past week.

Thirteen drilling operations in the townsite area are nearing the 4000 foot oil zone, the completion of which is expected within the next two weeks, tend to increase the production of the townsite field still further. Some oil company statisticians are predicting that because of the rapidity with which new wells are being completed, that this small area will be producing around 50,000 barrels by January 1, 1927. The California Petroleum Corporation has three wells drilling below 3900 feet which are scheduled for early completion. Its Sandburg No. 1 approaches the deep pay at 3967 feet, its Schwartz Community No. 1 is drilling at 3948 feet, and its Tubach No. 1 is standing cemented at 3952 feet. Julian Petroleum Corporation's Plavan No. 1 is nearing the deep sand at 3850 feet. McKeon Oil Company's No. 1 Smith reports sandy shale at 3920 feet.

Petroleum Securities Company has four wells very close to the lower oil stratum. Its Gibson No. 1 reports shale at 4002 feet; Lambert No. 1 is in shale at 4049 feet; Machris No. 1 is drilling in gray sand at 3988 feet and its Montgomery No. 1 reports shale at 3920 feet.

The Standard Oil Company reports that its Huntington No. 7, drilling at 4075 feet has not yet penetrated the second oil zone. This company's next deepest operation is Huntington No. 6, reported at 3775 feet.

The Superior Oil Corporation is reaming at 3979 feet in its Gillette No. 7-2 and is still having water trouble after numerous attempts to secure a water shut off in its Gilmore No. 1 at 4019 feet.

The United Oil Company is running 6¼-inch in its Ward No. 1, having reached the depth of 2960 feet. The Wilshire Oil Company's Huntington Beach No. 3 is standing cemented at 3896 feet.

52 Producing Wells

Fifty-two producing wells are yielding close to 30,000 barrels of oil in the townsite area. Standard Oil Company with 27 producing operations is both the largest operator in the area and the largest producer. Its production is about 7150 barrels. The Ambassador Petroleum Corporation, Hogan & Lytle, Julian Petroleum Corporation and the United Oil Company have one producing well each. Wilshire Oil Company has two wells in the producing class, while California Petroleum Cor-

poration, E. J. Miley Oil Company, and Petroleum Securities Company have three wells each. Geo. F. Getty has four producers and the Superior Oil Company has six. The average production for the field is about 575 barrels per well.

Surprise Well at Signal Hill

It has been almost two years since the old Signal Hill field at Long Beach contributed anything like a big well and operators in this district were surprised when the Pan American Petroleum Corporation completed its Chaney No. 2 in about the central northwest section of the old field, flowing 28 gravity oil at the rate of 1400 barrels. In order to take care of all of the oil bearing zone it was necessary to include in the oil string 1225 feet of perforated pipe. The well was completed at 5389 feet.

Jim O'Donnel, veteran oil producer and discoverer of the Los Cerritos field at Long Beach, contributed the largest well that has been brought in in the northwest field at Long Beach for many weeks. O'Donnel's Los Cerritos No. 56 was completed at 4517 feet flowing 400 barrels of clean oil.

Seal Beach

The outlook at Seal Beach has changed rapidly for the better during the last few days. Marland Oil Company's Bixby No. 2, the so-called "wonder" well is still producing around 1800 barrels daily, and two more of Marland's operations have penetrated the oil sand. Marland's Bixby No. 3 found the sand at 4390 feet and its Bixby No. 4 encountered the oil bearing stratum at 4388 feet. Marland's Selover No. 1, located about 1800 feet west of the discovery well, however, is still searching for the oil zone, drilling 4565 feet without encountering anything encouraging.

The Standard Oil Company is still drilling ahead in its San Gabriel Improvement No. 1 at Seal Beach around 4300 feet, but reports nothing of interest.

World's Deepest Hole to Be Tested

The Chanslor-Canfield Midway Oil Company will soon be in a position to test its world's record deep test, Olinda 96, in the Brea-Olinda district.

Cook Field Completions Open New Area

Breckenridge, Texas—The southeast extension of the Cook field in Shackelford County contributed two flowing wells late last week, thereby indicating that considerable virgin acreage is awaiting the drill around the Tannehill Oil Company's extension well. Hyde and James' Moberly 1, located in section 59, was completed with an initial flow of 35 barrels per hour from regular sand pay at 1130-45 feet. Roeser-Pendleton Inc. and Marland Oil Company's W. I. Cook 1-E, section 60, is credited with having flowed 830 barrels of 40 gravity oil during the first 19-hour gauge from sand at 1134-51 feet. The performance of these two wells will have a stimulating effect on drilling activity.

The Milham Corporation's T. E. Moore 1, located in section 1561, T. E. & L. Survey, Shackelford County, and near a deep lime producer, brought in by the above concern last June, encountered a stray sand pay at 2145-48 feet and swabbed 150 barrels daily. In Comanche County, the Texas Pacific Coal & Oil Company's Kirk 1, located in the southwest corner of the northwest quarter of section 21, D. A. L. Survey, has been completed with an initial production of 30 barrels daily from lime pay at 2675-2715 feet, with a total depth of 2940 feet. Wolf and Associates' Guinn 1, also in Comanche County, is showing for a 45-barrel producer from lime pay at 2810-45 feet. The latter two producers are in semi-proven territory.

The Woodson-Masters field in southeast Throckmorton County added another deep lime producer last week, when the Red Bank Oil Company's Parrott 2, located in the northeast corner of the northeast quarter of section 971, flowed 600 barrels natural at 3939-64 feet, and may be carried deeper. Reiter-Foster Oil Corporation's east offset is flowing by small heads at 3961-66 feet.

In Callahan County, the Empire Gas & Fuel Company's Johnson 1, located in the northwest corner of section 146, G. H. & H. Ry. survey, is making about three million cubic feet of gas from sand at 2900-08 feet, and will go deeper to try for oil production.

Court May Be Called Upon to Decide Ownership Of Residue Gas in Osage

Tulsa, Oklahoma. — Indications are that the question of ownership of gas in Osage County for reintroduction into oil sand to build production will have to be settled by friendly suits in the courts.

This is the conclusion, following receipt of a letter from Charles H. Burke, Commissioner of Indian Affairs, to J. George Wright, superintendent of the Osage Agency at Pawhuska. The letter follows a hearing before the Department of the Interior at Washington, June 18, when an effort was made to get further rulings as to gas ownership for such purposes.

The case dates back to last summer, when holders of gas leases and holders of oil leases came into dispute as to their respective rights in using gas for this purpose. Gas lessees contend gas can not be used for such a purpose by oil lessees, while oil lessees contend that residue gas can be used for this purpose without payment.

At that time parties to each side of the controversy said they believed a friendly suit would have to be taken through the courts to decide the question. The hearing at Washington was decided on however.

The letter of the Commissioner of Indian Affairs to the superintendent of the Osage Agency follows:

"Receipt is acknowledged of your letter of Oct. 11, 1926, relative to the matter of oil lessees being permitted to inject air, water or residue gas into oil wells for the purpose of restoring pressure to increase the production of oil.

"There is enclosed for your information and records a transcript copy of the proceedings had at the hearing held in this office on the subject June 18, 1926. It will be noted from what was said by those representing the oil and the gas lessees that the matter of prescribing regulations to permit and govern the practice has raised the question as to whether the oil lessee or the gas lessee is the owner of the residue gas. The opposite views of the two lessees are arrived at from the construction each places upon certain provisions in the oil and the gas leases and regulations. The record of the hearing shows that the two groups are at rather sharp issue on the question of the legal ownership of residue gas left after the gasoline has been extracted from the casinghead gas coming from oil wells. In fact the record indicates that the matter of instituting a friendly suit for the purpose of determining the legal rights of the parties had been considered by the lessees prior to the hearing; and it appears that should the department undertake to construe the leases and determine who under their terms owns the residue gas, the lessee against whom the case was decided would not rest with the decision but would institute suit for the purpose of obtaining a court decision, determining the respective rights of the oil and gas lessees to the residue gas.

"There were also expressions at the hearing favorable to temporary arrangements for a conference with you, should any lessee desire to resort to the injection of any extraneous substance in any oil well to restore pressure, for the purpose of deciding whether the operation would be permitted and if permitted, it was believed that perhaps in the majority of cases the lessees interested would reach a satisfactory agreement as to the use of the residue gas.

"In view of conditions as they now exist, it is not believed advisable to adopt general regulations covering this subject. If any specific case arises where it is desired to resort to the practice indicated and the parties interested are unable to reach a satisfactory agreement the case may be submitted to this office for consideration. You may accordingly so advise the representatives of the oil and gas lessees and the casinghead gas manufacturers."

Gulf Production Company Pays $2,000,000 For 28,000 Acres in Crane and Upton Counties

Fort Worth, Texas.—Gulf Production Company has contracted to purchase the 900 barrel flowing oil well drilled in last week on a 160-acre tract in the Gulf-McElroy field, Crane County, along with a total of approximately 28,000 acres of leases in Crane and Upton Counties from W. H. Dunning, Jr., of Fort Worth. Gulf took possession of the producing well October 29, and is expected to consummate the trade before the end of the present week. No official announcements have been made by either party to the contract, but it is understood that the consideration will amount to about $1,000,000 cash and a like amount in oil.

The purchase of Dunning's producing lease and wildcat acreage places Gulf in complete control of all close in acreage around the six producing wells in the field. The White Eagle Oil & Refining Company has a half section under lease one and one-half miles east of the best well in the field, and may be the only outside company to share in the production, unless the Gulf-McElroy and Church & Fields areas should be connected up later. The complete history of this area along with a detailed map was published in these columns last week.

Two wildcat tests are to be drilled by Dunning on the McElroy Ranch and turned over to Gulf if oil or gas producers, according to the terms of the trade now pending, as Dunning contracted to drill in the center of the northwest quarter of section 134 and also in the center of the northeast quarter of section 155, CCSDRGNG survey, block "E", Upton County, and sold acreage around same before entering into the trade with Gulf. Materials are on the ground for these two wildcats, and drilling will proceed promptly, according to Dunning. Dunning originally held leases on about 80 sections of land in the McElroy ranch, but is surrendering all of his unsold leases to Gulf.

Humble Pipe Line Company connected up with Gulf's producing wells on the McElroy Ranch October 28, following a crude exchange deal worked out between the two companies, and ran a total of 13,730 barrels during the three day period ending November 1, such being a daily average of 4576 barrels, with several of the smaller producers partially pinched for lack of pumping capacity. Humble is moving this oil via a six-inch line to McCamey, where eight-inch line ties into the Big Lake pump station, thence to the Gulf Coast.

Gulf's Crier-McElroy 1, which was reported last week as flowing 120 barrels per hour from sandy-lime pay at 2699-2749 feet, was flowing 2400 barrels daily early this week. This well is the largest completed in the field to date, and is to be deepened as soon as Humble can provide for handling the oil.

La Barge Development

Casper, Wyo.—Recent large deals in the La Barge field have attracted the attention of operators throughout the Rocky Mountain district, and they are marshalling their forces to acquire a part of the most desirable acreage in the region. The field has been a small producer for several years but escaped the attention of operators generally. The producing sands are shallow and the oil is of a very good grade. The field is isolated, being almost 50 miles from the Union Pacific railroad. The California Company has spent several hundred thousand dollars in acquiring leases.

Ohio Oil Operations in Colorado

Denver, Colo.—The Ohio Oil Company, reported last week as having again entered Colorado, has acquired more than 6000 acres of promising leases in La Plata County. It has also taken over the W. H. Hall holdings, on which a commercial producer is believed to have been completed. The well is an old one but has been drilled spasmodically for more than two years. Immediately after the discovery of oil, the Hall interests negotiated with the Ohio Oil Company. The latter had drilled five dry holes in the Colorado during the past three years and was cautious about re-entering the State. When it was found, however, that the leases surrounding the well could be tied up, the deal was made. The Ohio interests have not announced their intentions.

West Texas Producing Area Crosses Pecos; Wildcat Flows 100 Barrels Daily

San Angelo, Texas.—The trend of wildcat activity and lease buying in West Texas shifted to the southwest of previous oil strikes late last week when the 50-50 test of the Mid-Kansas Oil & Gas Company and the Transcontinental Oil Company in eastern Pecos County, near the Pecos River, flowed by heads at regular intervals with a good gas pressure from sandy-lime pay at 990-97 feet through 12½-inch casing. The production of this wildcat is rated at above 100 barrels daily, and during the 24-hour period ending Monday afternoon put 80 barrels of about 28 gravity oil in flow tanks through a two-inch line.

The Pecos County oil strike is located on a block of about 9000 acres owned jointly by Mid-Kansas and Transcontinental, and about one and one-half miles west of the Pecos River, which has heretofore marked the western limits of oil production in West Texas. The well was drilled on the I. G. Yates ranch, and located 2900 feet due west of the southwest corner of section 60, I. & G. N. Railway survey, block 1, but in the I. G. Yates strip No. 8195.

This new oil producing area is the shallowest in West Texas, and is about 23 miles southwest of the World pool, Crockett County, and 30 miles southeast of the Hurdle district. The surface elevation on the Pecos County producer is 2400 feet. The flow of gas accompanying the oil was estimated at two million cubic feet of gas when the well began flowing by heads through the 12½-inch casing. The oil production and gas carries a sulphur odor, and reports on the gravity of the oil range from 26 to 29 degrees, thereby indicating that the oil is on a par with that found in the World and Hurdle districts. The drilling block held by Mid-Kansas and Transcontinental is long and somewhat narrow, and extends parallel with the river. Pure, Gulf, Marland R. R. Penn and The California Company are the principal lease owners. The oil production will be used for fuel, pending a daily volume that will justify a pipe line connection by Humble or the Southern Pipe Line Company.

The Hurdle district, which centers on the Crane-Upton County line, is now amply served by pipe line and tank car crude shipments, and a market is available for all oil produced. The entrance of the Southern Pipe Line Company, crude buying subsidiary of Standard of Indiana, some weeks ago stirred up competition among the crude buyers in the district, and are now setting the pace for new connections. Humble has completed its eight-inch line from the Big Lake field pump station to McCamey, with a six-inch gathering system in the Hurdle district and running as far north as the Gulf-McElroy and Church & Fields areas in upper Crane County. The Texas Company is moving its production out in tank cars to refinery at Dallas, while the Roxana is also handling its own production by tank cars. Marland Pipe Line Company is another tank car shipper from the district.

Salt Creek Well Flows 400 Barrels Hour

Casper, Wyo.—The most spectacular development for months in the Salt Creek field was the completion during the week of a 10,000 barrel well in the Lakota sand by the Midwest Refining Company. The well was not allowed to flow a full 24 hours, but produced at the rate of more than 400 barrels per hour on a short test. The Lakota sand was found at 2404 feet and drilled to a depth of 2064 feet. The performance of the well was very encouraging in the face of a gradual decline in production from the upper sands. The well is located on section 2[illegible]40 79.

Panhandle Production Decline May Mean Peak Is Passed

New wells are smaller as gas pressure goes off, while weather will seriously effect operations

By H. H. KING
Staff Representative

Amarillo, Texas.—The peak of daily production in the Texas Panhandle district is believed to have been reached, and during the past week the district averaged 157,830 barrels daily from 601 active producers, representing a decrease of 1140 barrels from the high mark established the previous week. The fact that daily average production registered a slight loss over the past week is not taken as evidence of a reversal of the trend of production, but cold wet weather, declining gas pressure in the oil pay horizon and a smaller percentage of big producers among the new completions in Hutchinson County are factors that contribute to production losses. Weather conditions have retarded field work during the past week, and another drop is expected on the next report of daily output for the district. An early return of clear warm weather can make a higher production peak possible, as Hutchinson County is not producing at its maximum rate.

Other than a 10-cent cut on each gravity grade posted by Humble on Gray County crude, the Texas Panhandle district was not affected by the crude price changes made early this week. However, a kickback is expected to be felt by Panhandle operators from the Mid-Continent cut, as Panhandle crude will not have the big price advantage over Mid-Continent oil to independent plant owners. Until Monday Panhandle crude was quoted more than a dollar per barrel f. o. b. well under the same grade of Mid-Continent oil, but the price cut on the latter crude takes away a portion of the advantage, and refiners will not be so interested in Panhandle oil

The tank car movement of crude from the Texas Panhandle exceeded 100,000 barrels daily during the past week over the Santa Fe lines, and the freight congestion on the Isom-Borger spur line is clearing up, thereby permitting heavier movements in cars. Crude stocks in the district on October 15 amounted to 5,767,000 barrels, or 1,101,450 barrels more than the total reported at the close of September.

Record Shot

A new record for nitro shots in Hutchinson County was made October 31 when Currie Brothers and J. R. Phillip's Smith 3, section 14, was bumped with 990 quarts in sandy lime pay at 2810-2980 feet. This well is credited with flowing 4100 barrels during the first eight hours, but the flow of oil dropped sharply to 110 barrels per hour. It was flowing 2250 barrels Monday with about four per cent of water in evidence. The No. 1 well on this same lease was shot with 600 quarts last May at 2900-3030 feet, and after drilling out bridge a week later flowed 4500 barrels initial.

Another westward extension for the oil area in Hutchinson County is promised by the Sinclair Oil & Gas Company's J. L. Williams 1, located in section 43, and on the north side of the river. This wildcat is standing with a show of oil in sandy-lime pay at 2905-07 feet. The Big Creek Petroleum Company et al's Cal Merchant 1, located in section 34, and nearer production than the Sinclair test, has been delayed in completion for lack of storage, but gauged 38 barrels per hour from pay at 2718-20 feet.

Marland Oil Company's first test in the Canadian River and near oil production in Hutchinson County has reached a depth of 3120 feet without showing oil. This test has an elevation of 2795 feet. Piling is being driven for a second river bed test by Marland near the northwest corner of section 69, block 46, while location has been made for a third test. Drilling in the river is costing more than twice the amount of a test on land in the same area.

Roxana Petroleum Corporation's wildcat oil producer on the B. E. Finley farm, Cheney survey, Gray County, is swabbing 60 barrels of high gravity pipe line oil daily from sandy-lime pay at 3010-19 feet, with a surface elevation of 2936 feet. This producer has attracted the attention of geologists owing to its production coming from 83 feet below sea level without showing water, while most of the producers in the Panhandle encounter water when drilled below sea level depth. This producer is about five miles east of the Wilcox-Pampa field.

Merle Cadman et al's wildcat test on the J. T. Sneed ranch in the southeast corner of Moore County failed to make an oil producer when deepened to 3233 feet. This test was reported last week as having a good show of oil at 3225-26 feet, with a surface elevation of 3261 feet. In Hemphill County, the Fisher Oil Company's wildcat test on the J. E. George land, section 40, H. & G. N. survey, block A-2, is credited with having encountered a small show of oil in brown shale at 2670 feet.

PANHANDLE OPERATIONS

Amarillo, Texas.—Condensed summary of field operations in the Texas Panhandle district at the close of last week is listed below by counties, with comparative totals for the previous week:

	Completions	Active Tests	Shut Down	Rigs and Derricks	Locations	Totals
Armstrong Co.	..	1	..	..	1	2
Briscoe Co.	..	..	..	..	1	1
Carson Co.	3	25	4	14	5	51
Castro Co.	..	..	..	1	1	2
Childress Co.	..	1	..	1	..	2
Cochran Co.	..	1	..	..	..	1
Collingsworth Co.	..	1	1	..	2	4
Dallam Co.	..	1	1	..	..	2
Deaf Smith Co.	..	..	..	..	2	2
Donley Co.	..	1	..	..	..	1
Gray Co.	8	71	9	17	5	110
Hansford Co.	..	..	2	..	1	3
Hartley Co.	..	4	4	1	1	10
Hemphill Co.	..	2	2	1	1	6
Hockley Co.	..	1	..	..	..	1
Hutchinson Co.	31	195	59	79	32	396
Lamb Co.	..	1	..	..	..	1
Lipscomb Co.	..	2	..	..	..	2
Moore Co.	..	8	4	1	..	13
Motley Co.	..	..	..	1	..	1
Ochiltree Co.	..	..	4	1	..	5
Parmer Co.	..	..	..	1	..	1
Potter Co.	..	3	2	1	..	6
Randall Co.	..	1	..	..	..	1
Roberts Co.	..	4	1	2	1	8
Sherman Co.	..	2	..	1	..	3
Swisher Co.	..	..	..	1	..	1
Wheeler Co.	..	8	5	11	..	24
Totals	42	333	98	134	53	660
Totals for previous week	33	349	97	114	59	652

Gulf Has Show in Test at Stratton Ridge

Houston, Texas.—The Gulf Production Company has encountered a show of oil in its Perry No. 1 wildcat test on the southern edge of Stratton Ridge salt dome, Brazoria County, which revives interest in this section considerably. The depth of the sand is reported to be slightly below 3200 feet. The test is located on an 850-acre tract owned in fee by Mrs. H. B. Perry. The hole was being reamed Wednesday of this week for the setting of casing for a test of the sand.

Commercial production of significance has never been obtained at Stratton Ridge. While indications of oil have been in evidence around the dome since 1900 due to gas seeps, drilling dates back only to 1913, when Jake Dannenbaum started a series of tests. On May 12, 1922, the Freeport Sulphur Company, drilling on land owned by Dannenbaum & Tolar, completed the discovery well to the northeast of the dome for about 1500 barrel from 4368 feet. After flowing five days the well sanded up. A total of 47 tests have been drilled at Stratton Ridge, but no other wells equaling the discovery well have been brought in. Only a few wells have found oil, and these have never made commercial production. At present there is no commercial production from the field.

The Perry No. 1 test is located nearly two miles south of the Freeport Sulphur Company discovery well, and on a different side of the dome.

Deeper Production at Spindletop Believed from New Sand

Flow of 7500 barrels from 5002 feet enhances potential possibilities of prolific producing area

By WALLACE DAVIS
Staff Representative

Beaumont, Texas.—Greater production possibilities for the deep sand extension of Spindletop were brought to light Saturday, October 30, when Yount-Lee Oil Company's Fee No. 9 flowed 7500 barrels initial through a ¾-inch choke from a total depth of 5002 feet. The crude tested 32 Baume gravity, the lightest oil yet produced at Spindletop, and is coming from a pay level 562 feet lower than any former production in the field. This sand, while considered one of the same group of sands now producing in the extension to the southwest of the dome, is believed by Coastal Operators generally to be a different and distinct sand, and one which has not produced previous to completion of the Fee No. 9 well.

After flowing 24 hours the well was placed on a ⅝-inch choke, and still increased to 7,700 barrels. It showed no signs of b.s. nor water. Production is coming from about 20 feet of sand through one joint of screen.

The Fee No. 9 is located 200 feet southwest of Fee No. 7, a producer of several weeks, and slightly more than 300 feet northeast of the Gulf Production Company's Weed No. 4, which made 10,000 barrels from 4244 feet approximately two months ago. It offsets the Sun Company's McLean lease on the north and is in close proximity to the Sun's McLean No. 4, completed two weeks ago for 4800 barrels from 4440 feet and the deepest well in the field prior to the Fee No. 9.

More Wells to Go Deep

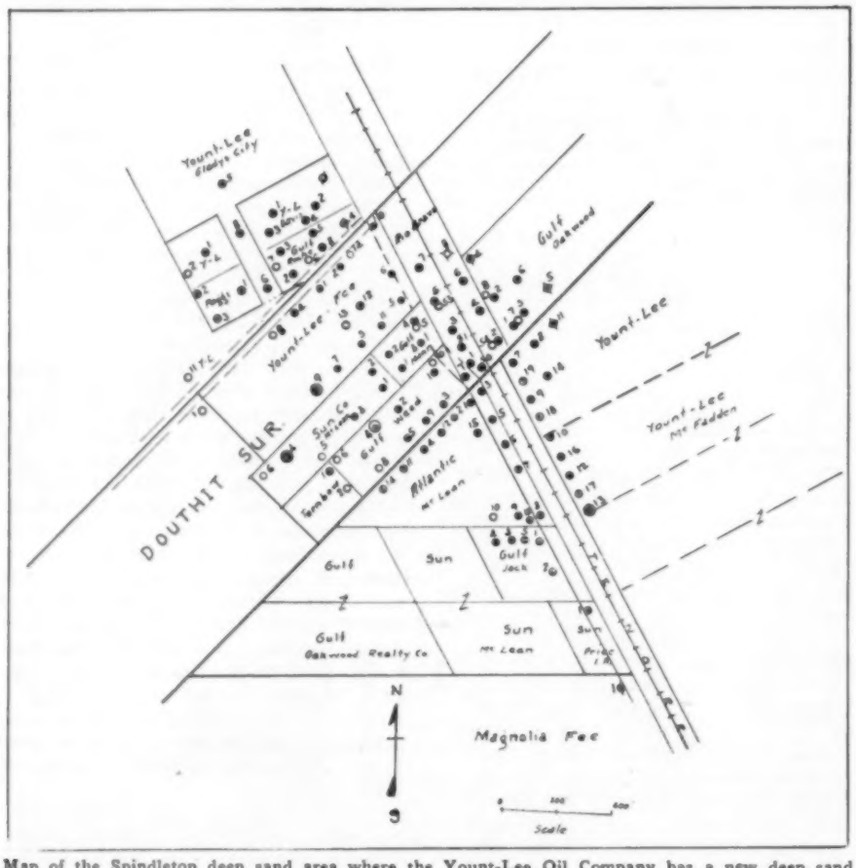
The new Yount-Lee well adds considerable potential value to leases around the dome, particularly in the vicinity of the 20 acres where nearly 10,000,000 barrels of crude have been produced since late in June of this year. Its completion means that practically all of the acreage in the new extension will be drilled to the new pay level, much of which activity is under way already. It further means that the decline in Spindletop production, which has to some extent been in evidence for the past month, is automatically checked. If a new peak is not attained in the near future as a result of the deep discovery as is the general belief, or even if production does not show a material increase within the next month, the fields' production will have little chance of dropping. All in all, Yount-Lee's find will result in the offside area being a longer time proposition.

While the proven acreage in the deep sand section is far from being drilled up the central part of the extension has been weakening considerably within the past few weeks due to appearance of salt water in many of the wells and an apparent weakening of gas pressure. In all probability this old acreage will be drilled over by either deepening of old producers or offsetting the old wells at close distances. Former tests that were either abandoned at higher levels or shut down are now receiving attention, and many holes are expected to be deepened to the Fee No. 9 depth. More than this the success of the deep well is expected to encourage deep drilling at other points around the dome.

The four deepest wells in the Spindletop extension, all producing from below 4000 feet, are indicated on the accompanying map by a circle around the producer mark.

Due to slight declines in wells generally the field showed a drop of 2500 barrels within 24 hours ending at 7 a. m. November 2, after rising to 94,460 barrels following completion of the Yount-Lee well. The Fee No. 9, however, was holding up to its initial yield at that time.

Activity at the close of the past week in the Spindletop deep sand area included 28 wells drilling or working over and five wells preparing to drill. Magnolia Petroleum Company junked the hole on its Fee No. 1, drilling on its tank farm site, at a total depth of 4095 feet, and was preparing to move over to an offset location. This test represented the southern-most activity in the field. Atlantic Oil Producing Company's McLean 11, located almost in the center of the McLean five-acre triangle tract bordering on the T. & N. O. right-of-way, was reported showing salt water at approximately 4400 feet Tuesday morning. Decision had not been made at that time whether or not it would be drilled deeper.



Map of the Spindletop deep sand area where the Yount-Lee Oil Company has a new deep sand at a depth below 5000 feet.

W. J. Sherman of The Texas Company production department, Houston headquarters, is back in the office after a vacation of two weeks.

With 4 Cup and Pipe Extensions

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"OILWELL" Imperial Plunger Pumps have been giving satisfaction in both domestic and foreign fields for more than 20 years. They are designed and built to meet severe pumping conditions, and can be used with 2, 2½, 3 or 4 inch tubing.

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Simplicity of design is an outstanding feature ---the parts are not complicated and are few in number, and such parts as valve cages, balls, seats, cups and cup rings are "standard".

The Garbutt Rod Attachment is furnished, when desired, which permits pulling the standing valve. Four cup upper or lower plunger extensions can also be furnished and are used to assist the plunger after it has become worn, thereby extending the life of Imperial Plunger Pumps.

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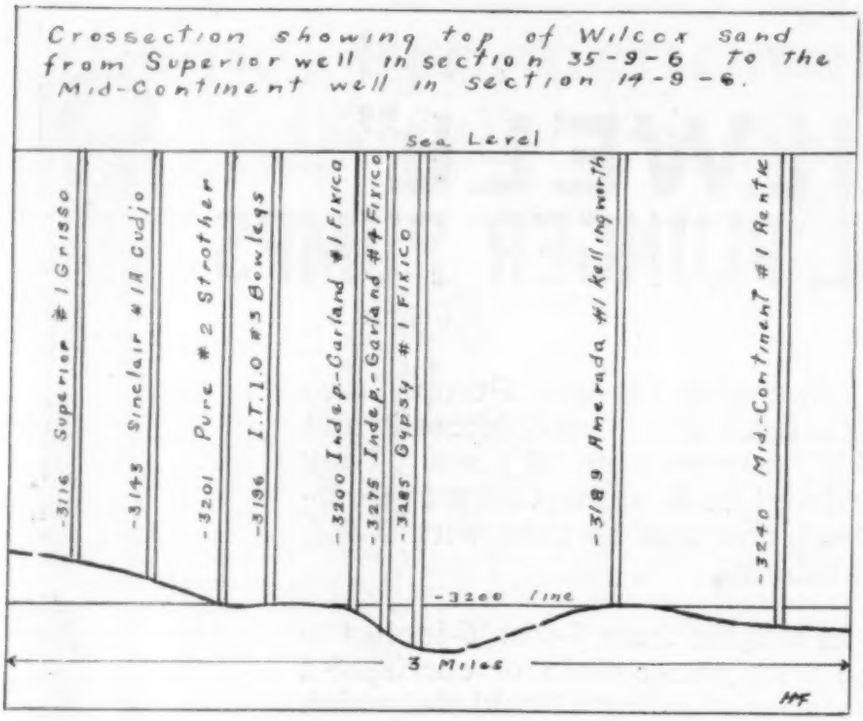

Crossection showing top of Wilcox sand from Superior well in section 35-9-6 to the Mid-Continent well in section 14-9-6.
Sea Level
-3116 Superior #1 Grisso
-3145 Sinclair #1A Cudjo
-3201 Pure #2 Strother
-3196 I.T.L.O. #3 Bowlegs
-3200 Indep.-Garland #1 Fixico
-3275 Indep.-Garland #4 Fixico
-3285 Gypsy #1 Fixico
-3189 Amerada #1 Kellingworth
-3240 Mid-Continent #1 Rentie
-3200 line
3 Miles
MF

Wilcox Runs High to Southwest at Seminole City

(Continued from page 26.)

that the Superior well southeast of it has the Wilcox lower indicates that the high point for the structure will be found in either sections 34 or 35.

Thickness Not Known

The fact that wells west of the accompanying cross section are running high indicates that the producing limits of the field will extend into sections 27 and 34. Only continued drilling can outline this.

Thickness of the Wilcox sand is yet to be determined. The discovery well of the field has been drilled 18 feet into this formation. Of the 24 Wilcox wells producing, one being shut down, their average penetration of the Wilcox is nine feet. Some have only two feet of the sand.

Deepening will not be attempted until further outlet is provided.

So far the field has had little water trouble. The Amerada-Gardner well has shown water for several weeks. It is producing by the aid of gas lift, which is holding output up.

Initial production has been such that it is hazardous to guess what peak production of the field may reach. Unless there is some immediate relief by pipe lines, which seems unlikely, the peak production will be restricted. But an estimate of 200,000 barrels daily seems conservative, considering possible handicaps. If freed of restrictions the output could surpass this.

Limes Productive

Side from Wilcox sand production, the whole area has chances of oil from both the Hunton lime and the Viola lime. Both these have been found productive. In fact 21 Hunton lime wells are now producing, having average output of 500 barrels daily. It was the Hunton lime, which first proved productive around Seminole City.

These two formations are somewhat erratic, being absent in a few wells. Erosion is credited with erasing these, where some lower formation is running high.

The Viola lime was productive in the Pure Oil Company's No. 2 Lewis in the northeast corner of the southeast of the southeast of section 26-9-6. It was topped at 3955 feet. First pay was found at 4020 and drilled to 4025. The well flowed 500 barrels before the Wilcox was topped.

No. 1-B Cudjo of the Sinclair Oil Company also had oil in the Viola lime at 3880 feet. This well is now shut down on top of the Wilcox to await outlet before drilling in.

In the Pure Oil Company's No. 3 Strother in the southeast of the southwest of section 26-9-6, the Hunton lime was absent. Silvan shale was topped at 3860 feet and the Viola lime at 3964 feet. This well was shut down at 3974 feet with a show of oil and gas.

Report Shows Tax Paid By Oil in 1924

Washington, D. C. — Income and profits taxes aggregating $10,673,772 were paid last year by corporations engaged in the production of oil and gas on their 1924 operations, it is shown by statistics of income just compiled by the Bureau of Internal Revenue.

Income reports were received from 3903 such corporations, 2418 of which paid no taxes because of the fact that their deductible allowances exceeded their gross incomes by $115,639,873. The 1485 corporations which showed a profit for the year, however, showed aggregate net income of $91,642,118, but were allowed deductions totaling $5,117,769 for a prior year losses before paying tax.

The report shows also that returns were filed by 587 corporations engaged in refining, 337 of which paid no tax, having an excess of deductions over gross income of $24,880,507. The 250 tax-paying corporations showed total net income of $214,776,541, with deductions for prior-year losses of only $1,001,148, and paid taxes aggregating $26,696,720.

No segregation of the individual returns was made to show the operations of individuals and partnerships in the various industries.

The number of individual returns filed for the country as a whole in 1925, covering income of 1924, was 7,365,390, the report shows. As compared with 1923, the returns for 1924 show a decrease of 328,533 in number, but an increase in total net income of $816,016,090, and an increase in total tax of $40,613,885.

The number of corporations filing income tax returns was 417,421, of which 236,389 reported net income amounting to $7,586,652,292 and income taxes of $881,549,546.

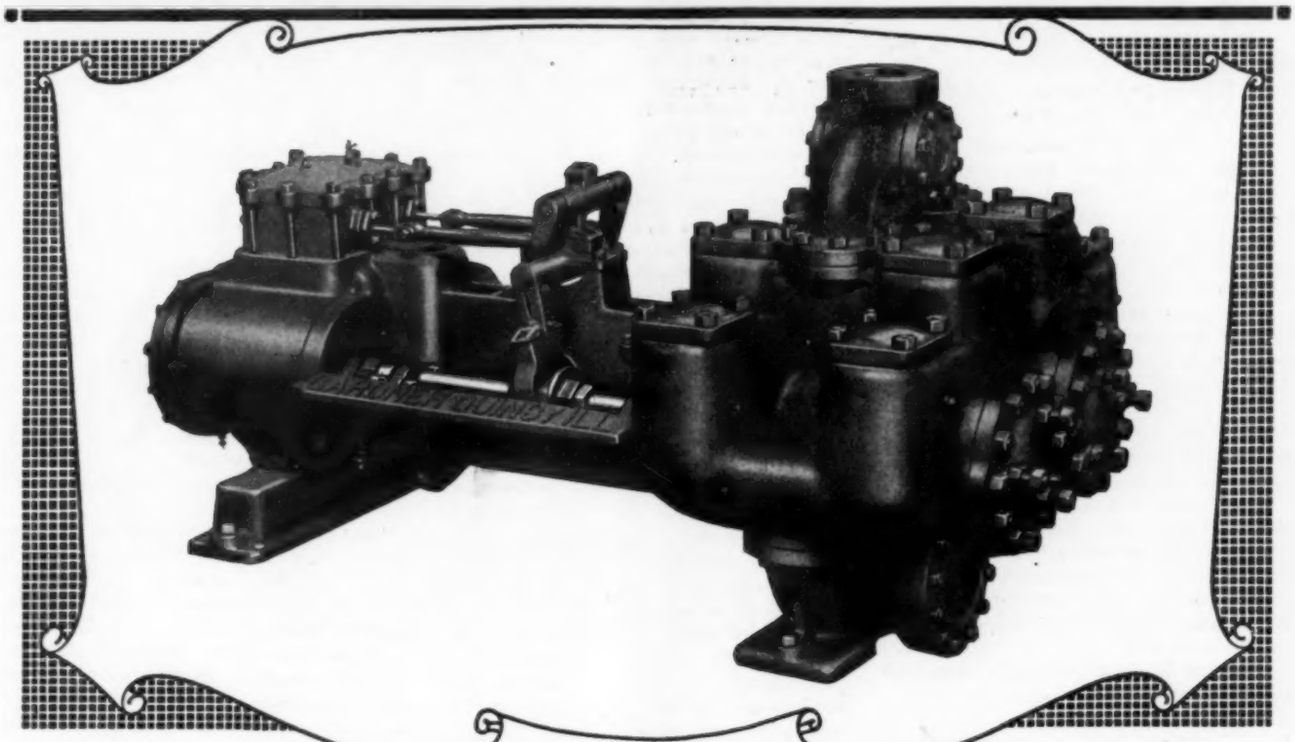
Discussing these returns the bureau shows that three individual reports for 1924 showed net income in excess of $5,000,000. There were also three returns of income between $4,000,000 and $5,000,000, four between $3,000,000 and $4,000,000, 15 between $2,000,000 and $3,000,000 and 50 between $1,000,000 and $2,000,000.

Wichita County to Have Town Lot Campaign

Wichita Falls, Texas—The Sunshine Hill district in upper Wichita County is receiving a townlot drilling campaign as result of the recent discovery of a prolific, but irregular, oil sand at the 1860-1900 foot level. This area was developed after the Burkburnett boom for the shallow pay, and the lower pay was not discovered until last summer. The exploration work that followed has brought oil production up to the group of town lots, and operators are now testing small drilling sites on these lots for production. R. R. Clark and others completed a 1250 barrel flowing well in this lower pay last September.

A new contract has been awarded by Magnolia Petroleum Company and the Continental Oil Company for the drilling of their deep test on the H. Beach farm in Southeast Burkburnett field, after the first contract carried the test to 3175 feet and exhausted his funds with a series of fishing jobs. Perkins and Cullum have taken the test over, and will try and drill through the big lime to determine if a deep pay underlies the Burkburnett field.

GARDNER SUPER-BOOSTER



For Heaviest Slush Service

For deep hole drilling where large volume of slush at high pressures is needed the GARDNER SUPER-BOOSTER is the pump that handles the job with ease. No more powerful pump is built for slush or oil line service. Normal working pressure, 1500 pounds; steam pressure, 225 pounds.

The new divided fluid end is an exceptionally valuable feature. It decreases breakage, lessens cost of replacements, and insures continuous operation. Design provides for direct flow of liquid through the cylinders, largely eliminating trouble due to improper filling.

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Emsco Derrick & Equipment Co., 6811 South Alameda, Los Angeles
Haywood-Williamson Co., Shreveport and El Dorado
International Supply Company, Stores in Principal Mid-Continent Fields
F. W. Heitmann Co., Houston
Norvell-Wilder Hardware Co., Houston, Beaumont, and Ft. Worth
Republic Supply Co., Los Angeles

GARDNER GOVERNORS PUMPS COMPRESSORS

GARDNER

Revised Schedule Makes Greatest Cut On High Gravities

(Continued from page 29.)

line from Drumright to the field and is running 5000 daily.

Shaffer Oil & Refining Company is laying a four-inch line from Drumright to the field and will take care of 5000 barrels daily.

Independent Oil & Gas Company has one four-inch line running five thousand barrels to Okmulgee and is laying a second four-inch line.

Seminole Production

If pipe lines were capable of handling well output, Seminole City could be boosted to 150,000 barrels daily this week. It is believed that the field could produce 200,000 barrels by the middle of November.

And some believe a daily output of 300,000 barrels could be reached between now and the first of the year, if drilling could move along unhampered.

Of the 119,000 barrels produced Monday, 106,000 came from 27 Wilcox sand wells. The remainder being from 21 Hunton lime wells.

The latest well to be completed is the Independent - Interocean No. 1 Jones, in the northwest corner of the southwest of the southeast of section 26-9-6, for 200 barrels an hour. Wilcox sand was topped at 4091 feet and drilled four feet.

The cut in Mid-Continent crude oil prices Tuesday morning came from a new and unexpected source, the Carter Oil Company, which previously has never announced a cut. Its purchases are transported by the Oklahoma Pipe Line Company.

Oil from the Wilcox sand at Seminole tests from 40 to 42 degrees, so the reduction there was around 50 cents a barrel.

First Change Since May

Humble's crude price reductions Monday were the first changes made in the Mid-Continent schedule in five and one-half months, as a 25 cent boost was initiated by Prairie on Saturday, May 15, and all other buyers followed suit with a top price of $3.57 per barrel for 52 gravity and above.

The downward revision of prices made by Humble varied from 87 cents per barrel cut on the top grade to a 15 cent cut on the 28 gravity. Humble retained the old gravity scale but changed the price difference between grades from eight to five cents. Although Humble's lower postings stop at 28 gravity, any crude bought under 28 gravity will be paid for with a corresponding decrease of five (5) cents per barrel for each lower degree of gravity. Magnolia's price below 28 gravity is flat $1.30 per barrel.

Other than Gray County, the Texas Panhandle crude prices were not reduced by Humble, but the gravity scale of prices in the former county were reduced 10 cents per barrel on each grade, making 28 to 28.9 gravity $1.00 and 44 gravity and above $1.80, as compared to a flat price of $1,25 per barrel put into effect some few weeks ago in all other Texas Panhandle Counties. Humble price schedule on crude purchased in Crane, Upton and Crockett Counties in West Texas were not altered from the posting made October 25.

The downward revision of Mid-Continent crude prices was not unexpected by producers and refiners, as recent price reductions in outlying oil fields from the Mid-Continent area, especially Texas Panhandle, indicated that the general crude price structure was being undermined by steady gains in daily production. The refiners' prices on gasoline had discounted lower crude quotations some weeks ago, and were considerably below the level necessary to break even when operating on Mid-Continent high gravity oil.

Standard Oil Company of New Jersey was destined to take the lead in lowering crude prices, as this concern has posted five reductions on its export price of gasoline, amounting to two and one-quarter cents, between August 9 and October 29 without a change in crude prices taking place during that period. Standard of New Jersey is carrying unusually heavy stocks of 64-66 gravity export specification gasoline at its shipping terminals on the Gulf Coast at this time, and lately has been slashing its prices to command a full share of the foreign buying of this commodity in order to liquidate its burdensome stocks. The quarter of a cent price cut posted October 29 by Standard of New Jersey on the high test gasoline nets North Texas refiners 9.40 cents per gallon f. o. b. refinery, and 9.30 cents net to refiners in Group Three territory. Such a price is below current prices on U. S. motor grade of gasoline, although a spread of one or two cents per gallon usually exists between the two grades. Atlantic Refining Company purchased more than a million gallons of 64-66 gravity gasoline last week from North Texas refiners at prices ranging from 10½ to 10⅝ cents f. o. b. plants, or almost a cent more than Standard of New Jersey's offer. However, the latter concern is not in the market for more stuff.

Relief to Refiners

Some relief for the Mid-Continent refiners, who have been the under dog for the past few months with low gasoline prices and high priced crude, will result from the new crude prices. Refiners operating on crude testing 39 to 40.9 gravity will get their crude for about 50 cents per barrel less than heretofore, such being the amount that many plants were losing on each barrel of crude put through their stills.

The reduction of Mid-Continent crude prices will automatically restrict the tank car market for Texas Panhandle crude, which moved out over the Santa Fe Railroad during the past week at slightly more than 100,000 barrels daily. Prior to the Mid-Continent price cut, Panhandle crude was available f. o. b. tank cars at a price that amounted to about $1.00 per barrel under the Mid-Continent schedule, but with this advantage cut in half the Mid-Continent refiners will not be so eager for the Panhandle oil.

Surplus crude production in Hutchinson County section of the Texas Panhandle has been marketed within the past ten days at 10 and 15 cents below the posted price, and the Bell Oil & Gas Company, which recently installed a crude gathering system and tank car rack near Isom, offered contracts last week at $1.38 per barrel loaded on cars. Panhandle production sustained a small drop during the past week, with a daily average of 157,830 barrels from 601 active producers, and may have experienced its peak for the year, as the gas pressure in the oil pay in Hutchinson County is receding, while the percentage of small producers among new completions is much higher. Carson and Gray Counties do not afford enough flush production to offset the natural decline that is expected from Hutchinson County shortly, while cold weather restricts field work and crude movement throughout the district.

Direct pipe line connections for the Crane-Upton County area in West Texas have been given by Humble Pipe Line Company through the extension of its eight-inch carrier from Kempner, near the Big Lake field to McCamey, with a six-inch line connecting the various producing areas up the east line of Crane County, including the Gulf-McElroy new field. Humble has agreed to give Gulf a pipe line outlet for all the McElroy production, and early this week was buying about 4000 barrels daily from this property alone. The Texas Company is now shipping its current production in the Crane-Upton County area via tank cars to its refinery at Dallas.

Petroleum Geologists Fall Meeting at New York

Tulsa, Okla.—The American Association of Petroleum Geologists will hold its fall meeting at the Pennsylvania Hotel in New York, November 15, 16 and 17.

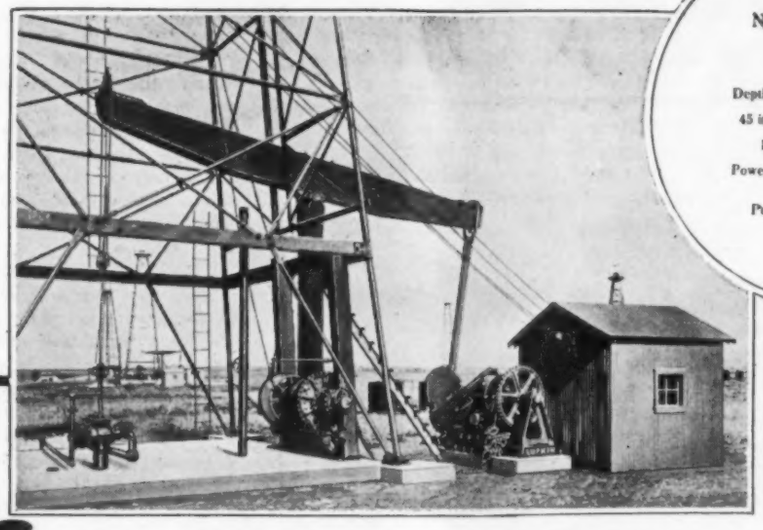
The program will include a series of discussions on continental drift, led by Dr. W. A. J. M. van Watershoot van der Gracht of the Marland Oil Company. Papers will be presented on Siberia, China, Australia, New Zealand, Mexico and South America.

E. DeGolyer is general chairman and Carroll H. Wegeman is the head of the program committee.

Well East of Burbank Making 300 Barrels

Tulsa, Okla.—Gardner and Comar well in northeast corner of northwest quarter of section 3-26-6, east of Burbank is making 300 barrels from sand at 2781 feet.

This well is between Burbank and production of Kewanee Oil Company wells in section 34. Dry holes are between Burbank and Kewanee.



No. 1 Sims Oil Company
Lee Doyle No. 8
S W Cor 15-13-14
Depth 2450 ft. 2½ in Tubing
45 in Stroke, 20 Strokes per min
Handles 465 Bbls of Fluid
Power consumed less than 150 K W per day
Pumping cost less than $2 25 per day

Every well *On this lease pumped by a* LUFKIN UNIT

The Simms Oil Company, on its Doyle lease at Morris, Oklahoma, uses LUFKIN Pumping Units on its six wells. The Simms Company had originally ordered four pumping units for four wells. These units performed so satisfactorily that the Simms Company, within a few weeks, discarded two single-cylinder gas-engine units having concrete foundations and belted rigs, which had been operating less than one month in competition with the LUFKIN Units.

The experience of the Simms Oil Company is no different from the experience of other large oil companies. These companies realize that production costs must be kept at a minimum. The first cost of the LUFKIN Unit is no greater than the cost of a standard rig; the LUFKIN Unit cuts in half the time for pulling rods and tubing, thereby reducing labor and power charges. The LUFKIN Unit may be operated by an electric motor or by a multi-cylinder gas engine, thereby assuring the minimum operating expense.

The economies in operation gained by the Simms Company have been duplicated by many other companies, such as: Humble, Gulf, Shaffer, Skelly, Vacuum, Amerada, etc.

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Say you saw it in The OIL WEEKLY

Progress in Waste Elimination in the Production of Oil

(Continued from page 34.)

sistance of the interfacial surface tensions, allowing a greater precipitation of water than is possible with the ordinary settling process. However, in treating systems of this type, usually no effort is made to save the gases liberated at the high temperatures used. These temperatures some times run to 180 degrees or higher, which results in a very high evaporation loss. H. H. Wiggins, of the Bureau of Mines, in Bulletin No. 200, made some experiments on Kansas crude of 37.5 degree A. P. I. gravity. He found that the losses ranged from 1.76 per cent at 80 degrees, to 6.7 per cent at 150 degrees. It is therefore evident that this process is very wasteful unless the gases are saved and fun through a gasoline plant.

3. In order to break down an emulsion it is necessary to break down the interfaces of the particles of emulsified water and the surrounding oil. Any chemical which will tend to coagulate, break, or dissolve this film will be more or less effective in causing a resolution of the emulsion. The action is largely physical-chemical, rather than chemical, and is based largely on surface tension. Chemical treatments are usually carried on in connection with a heating process, and here again pains should be taken to save the gases liberated by the temperature maintained.

4. When an emulsion is subjected to the influence of a high potential alternating electrical field, the minute water particles electrically charged by the field, rupture the enveloping oil films and units, forming larger water droplets, which readily settle out. The phenomenon is that of a multitude of series condensers, rather than of conducting paths. To use this method power must be available; or electrical generating equipment installed. This method has been used with good success in California and Gulf Coast Districts, and extremely low operating costs are reported.

5. Centrifugal dehydration is a quick means of separating pure oil, water, and b.s. but leaves the secondary problem of recovering the oil contained in the emulsion. Centrifugal force is much better for settling suspended water than the gravity method, as settling effect is directly proportional to force applied. Centrifugal force, however, is only slightly better than gravity for breaking up the viscous emulsions. A minute trace of the proper chemical re-agent will immediately do more to nullify the interfacial surface tensions than indefinite application of the highest obtainable centrifugal force.

Treatment of Tank Bottoms.—Treating tank bottoms involve especially difficult problems, not only in separating the oil and water, but in handling the oil after it has been separated, due to its very viscous nature. However, the treatment of tank bottoms has been successful accomplished by chemical treatment.

The Phillips Petroleum Company reclaimed 9000 barrels of petroleum products from 16,000 barrels of b.s. at Burbank, at an estimated cost of 15 cents per barrel saved. It seems that the best way to transport the heavy oil saved to the refinery is by means of tank cars equipped with steam coils. The congealing temperature of these oils runs about 85 degrees to 90 degrees F.

In order to gain some idea of the waste now involved when tank bottoms are lost, the following distillation analysis of a sample of tank bottom B.S. is given:

Centrifuge test at 140 degrees F. gave 75 per cent petroleum products and 25 per cent water and B.S.

Results of the distillation test of the petroleum products were as follows:

Gasoline	15%
Kerosene	16%
Gas Oil	20%
Wax Distillate	46%
Coke	3%
Total	100%

The wax distillate yielded 10 per cent lubricating oil and 36 per cent wax. The records of one large company shows that they have 468,000 barrels of B.S. in tank bottoms. Assuming that these tank bottoms have a distillation as given, the amount of useful products that could be recovered by this one company alone are:

	Per Cent	Barrels
Gasoline	15	52,000
Kerosene	16	56,000
Gas oil	20	70,400
Lubricating oil	10	35,200
Wax	36	126,800
Coke	3	10,500
Total		352,000

Waste Due to Fire.—The loss suffered by the industry annually due to fire is enormous. The majority of this loss occurs in the burning of large storage tanks usually caused by lightning. While some work has been done along the lines of fire prevention for large storage tanks, it seems that more money spent in this direction by the industry would result in true economy. In protecting a large storage tank against lightning is appears to be the best practice to provide a continuous conductor for carrying the lightning charge to the ground. The use of steel roofs, instead of wooden decking covered with tar paper and sheet iron, is a step in the right direction. On oil leases, equipment should be placed with due consideration given to fire hazard and adequate fire fighting equipment provided. Waste oil should be carefully drained to sumps and never allowed to stand in pools near open fires.

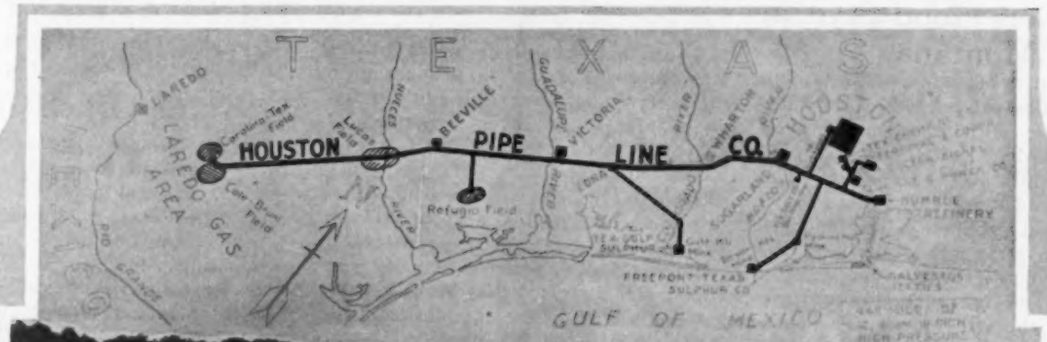
Small Recovery.—It seems to be a fairly well established fact that after our present methods of production are through there still remains in the ground about 75 per cent of the original oil deposit. While this unrecovered oil cannot be termed "waste," in the strict sense of the word, it appears that we are operating a system which is only 25 per cent efficient. Very decided progress has been made during recent years to increase this recovery, chief among which has been methods of pressure restoration and water flooding.

Waste Due to Careless Operation.—Accurate field records show that fully 20 per cent of the belts used on standard rigs pumping with gas engines are destroyed, due to the belts being allowed to ride the clutch and similar other causes. The percentage of wire lines, also, that are prematurely destroyed due to careless and improper uses and abuses is appalling. The same may be said of other classes of material used. Careless operation which permits the abuse of material not only causes waste due to the material actually destroyed, but necessitates the purchase of cheap and inferior merchandise that is not capable of giving the long economic service to be obtained from higher class products such as are used in other industries.

It is an established fact that the operating cost per well per year decreases as the production declines. On a certain Oklahoma property, after development was completed in 1920, the operating cost was $118,000.00, with a gross production of 294,000 barrels. The cost of operating this property for the year 1925 was $39,000.00, with a gross production of 50,000 barrels. The number of wells operated was substantially the same. While many factors enter into the reasons for this reduction in operating cost, it is undoubtedly due, in a large measure, to psychology. As the oil runs decrease in volume the field men realize that so also are the profits of their employers shrinking and greater economy of operation and methods are the natural result. It is regretable that these principles cannot be applied in the earlier stages of the life of a producing property.

Methods of Checking the Efficiency of Operation.—For old producing properties where the monthly per cent decline is constant, two sets of calculations can be made: one, based on the theoretical production and the theoretical operating expense, and the other based on actual production obtained and actual operating expense. The difference between the two results show profits above or below the average. Mr. W. B. Case, of the Roxana Petroleum Corporation, has done considerable work along the lines of mathematical determination of decline curves, and their application in this regard. The advantage of determining decline curves mathematically for this purpose, instead of plotting all the data, is obvious. It takes the work out of the realm of personal judgment and makes the method hard and fast, and susceptible of being applied to all properties equitably.

Need for Research.—The 1925 A. P. I. Report points out the need of co-operative research within the industry itself. Reluctance, however, on the part of companies who have invested large sums of money toward the furtherance of research, is only natural, and it is only right that they should benefit by any financial rewards that may result from their investment and efforts. At the same time, where duplication is incurred, co-operation would result in large savings, both in money and effort, and would enable a much more extensive field of research to be covered in the same time, resulting in more rapid progress in the reduction of waste in the industry as a whole. The lack of such co-operation can be properly classed as one of the wastes of the industry.



Over 400 miles!-and every inch is
"NATIONAL" PIPE

THIS 448 mile gas line is probably the world's longest and largest high-pressure natural gas line. It crosses five of Texas' largest and most treacherous rivers, being the Nueces, the Guadalupe, the Colorado, the Brazos and the Houston Ship Channel. The most difficult crossing was the Houston Ship Channel (which at the point of crossing was 2800 feet wide) in which there are six lines of 10-inch double length pipe each 3600 feet long submerged under the 30 foot Channel, the Government Engineers insisting that this line be buried 10 feet below the Channel depth.

The difficulties here can easily be imagined: the ductility needed for proper settlement on the uneven bed of the Channel and conformity to the bank on each side—the corrosive conditions in tidal swamp country as well as in the channel water—the necessity for sound joints, etc. Time, cost and carefully formulated plans of great engineers called for pipe of dependability—therefore, "NATIONAL" was used.

Typical country through which pipe was laid

Section of swamp land showing part of the line

NATIONAL TUBE COMPANY, PITTSBURGH, PA.
District Sales Offices in The Larger Cities

Pipe ready to be towed to center of ship channel and welded to similar section shown at top of page

Julian Gets Good Start in Montana

Great Falls, Montana,—The Julian Petroleum Company has made an impressive start with its operations on section 30-35-1w, Kevin-Sunburst field by completing a 1000 barrel well. The drill was headed for the Ellis sand if necessary, but production was encountered in the stray sand overlying the main producing formation. Several other wells on the section have produced from the stray sand. The completion of the well is very timely as the Julian interests recently entered the field after a $3,000,000 transaction. The new production will do much toward bolstering the declining production in the field. The Flickertail Oil Company apparently has even a better producer in the east extension of the Kevin-Sunburst field than at first thought. The well has been tubed and a packer set with gratifying results. The well was originally estimated at 100 barrels daily, but is actually producing 300 barrels daily. Much activity has resulted from the completion. The Bottineau-Minot Oil Company has also completed a good producer on section 33-35-1w, on which the Flickertail well is located. Four new wells were started during the week in the region.

Prairie Office Change

Tulsa, Okla.—Changes in offices of the Prairie Oil & Gas Company have taken Horace Fitzpatrick from Tulsa to Independence, where he is assistant to the general manager, in charge of production.

H. A. Meyer is now assistant to the general manager in charge of marketing.

Texas Panhandle Production

Amarillo, Texas—Daily average production in the five counties producing oil in the Texas Panhandle district for the past week is listed below by companies, with the total producing wells included:

	Number Wells	Average Daily Prod.
CARSON COUNTY—		
American Refining Company	7	520
Empire Gas & Fuel Company	1	30
Gates Oil Company	1	10
Gulf Production Company	17	350
Marland Oil Company et al	12	1,580
Republic Production Company	1	140
Roxana Petroleum Corporation	1	240
W. W. Silk et al	3	155
Skelly Oil Company	2	100
Sunny Jim Oil Company	2	45
The Texas Company	11	250
Totals	58	3,420
GRAY COUNTY—		
Empire Gas & Fuel Company	1	.....
Gulf Production Company	6	2,050
Magnolia Petroleum Company	4	155
McMan Oil & Gas Company	3	500
Phillips Petroleum Company	2	300
Prairie-Shamrock Pet. et al	3	835
Pure Oil Company	1	45
The Texas Company	1	10
Wilcox Oil & Gas Company	11	4,900
Young et al	1	90
Totals	32	8,885
HUTCHINSON COUNTY—		
Alaska Petroleum Company	1	35
Amerada Petroleum Corporation	9	760
American Refining Company	3	595
Apex Oil Company	2	300
Badger Oil Company	2	65
R. G. Barnum et al	1	55
Buffalo Oil Company	1	70
Canadian River Oil Company	5	390
Center Dome Oil Company	1	10
Center Field Oil & Ref. Co.	1	5
Cline & Douglas Oil Company	1	10
Coble-Whittenburg Oil Company	4	805
Cockrell-McIlroy Oil Company	4	505
Continental Oil Co. (Texhoma)	1	15
Currie Bros. & J. R. Phillips	2	970
Delmar Oil Company	1	60
Derby Oil Co. et al	4	1,150
Devonian Oil Company	4	550
Dixon Creek Oil Company	22	6,995
Double Five Oil Company	1	65
Douglas Oil Company	1	15
E. J. Dunnigan et al	1	600
J. B. Dunnigan et al	2	280
Echo Oil Company	3	1,770
Empire Gas & Fuel Company	7	3,870
Fly-Blackburn Oil Company	2	330
Gates Oil Company	4	405
Goldelline Oil Company	3	255
Golding-Phillips Oil Company	1	10
Gopher Oil Company	1	20
Gulf Production Company	29	7,820
W. Scott Heywood et al	2	80
Gulf-Cline-Panhandle Ref. Co.	38	6,955
W. H. Holmes et al	1	100
Holmes-Currie & McKnight	3	400
J. K. Hughes Dev. Co.	15	2,835
Japhet Production Co. et al	4	605
C. C. Julian Pet. Corp. (Canyon)	5	7,995
Lenix Oil Company	1	15
Lucky Ten Oil Company	3	740
Marland Oil Company	44	14,300
S. D. McIlroy	3	750
S. D. & W. W. McIlroy	7	1,100
McIlroy Oil Company	3	450
McIlroy-Herring Oil Company	4	650
McMan Oil & Gas Company	17	10,380
J. H. Middleton et al	3	75
Mid-West Exploration Co. et al	6	1,330
Minnehoma Oil Co. & Kistler 1	1	80
Murchison-Fail Oil Company	2	600
Newby Oil Company	2	85
New Domain Oil & Gas Company	3	170
Panhandle Oil Co. et al	1	25
Pantex Oil Company (Westex)	9	3,525
Pattison-Lenix Oil Company	1	290
J. R. Phillips	1	20
J. R. Phillips et al	2	350
J. R. Phillips & W. Scott Heywood	2	1,625
Phillips Petroleum Co. et al	87	32,240
Prairie-Phillips Pet. Co. et al	31	7,630
Relief Oil Company	4	950
Henry Riley et al	1	230
Henry Riley & W. H. Holmes	2	605
Roxana Petroleum Corporation	8	1,360
Ryan Con Pet. Corp. (Morton)	3	445
Skelly Oil Company	14	6,465
Skiatex Oil Company	4	905
J. L. Smith	2	65
Smith-Bynum et al	2	270
Spring Creek Oil Company	4	515
Summit Oil & Ref. Corporation	2	305
Sunburst Oil Company	2	1,300
Sunrise Oil Company	1	.....
Sunny Jim Oil Company	5	605
J. A. Swindler & Son	1	15
Travelers Oil Company	2	585
Triangle Oil Company	2	3,000
J. D. Ward et al	2	100
White Eagle Oil & Ref. Co. et al	17	3,185
Totals	502	145,070
POTTER COUNTY—		
Amarillo Oil Company	1	20
WHEELER COUNTY—		
Continental Oil Co. (Texhoma)	2	250
Gibson Oil Corp. et al	2	135
Mid-Kansas Oil & Gas Company	1	30
Mid-West Exploration Co.	3	20
Totals	8	435
Grand totals for past week	601	157,830
Grand totals for previous week	574	158,970

"Our Franklin Valveless Engine Runs Like a Cadillac"

That's what W. J. Bradley, driller for the Twin State Oil Company, thinks of his power plant. And no wonder! Look at his record.

500 Feet of Hole in One Week

On the Twin States wildcatter at Stillwater, Texas, Mr. Bradley put down 500 feet of 24-inch hole in seven days drilling. But speed isn't all the Franklin Valveless gives you.

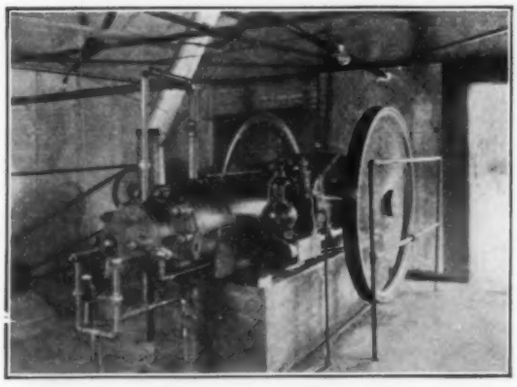
Saved $30.00 a Day

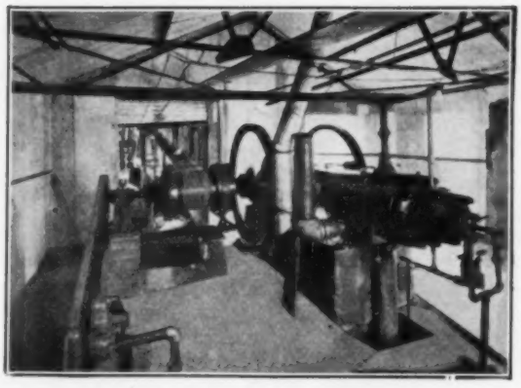
"If steam was used to drill this well," writes Mr. Bradley, "the cost would be about $25.00 a day for fuel oil, and the water which had to be pumped ½ mile, would cost $10.00 a day. The cost of our Franklin Engine is $2.50 a day for water and the same for fuel oil—meaning a saving of $30.00 per day on these two items alone."

Twin State Oil Company certainly got hold of two good men when they took on Ray Goff, Tool Dresser, and W. J. Bradley, Driller—shown here on the Stillwater wildcat location.

What About Your Drilling Costs?

More than one owner has found it costs him less to scrap his boiler and engine and put in a Franklin Valveless than to keep up repairs on his fuel-eating steam outfit. Ask the nearest representative for some facts and figures on the operating and maintenance costs of Franklin Valveless Oil and Gas Engines.





These two photographs give you a good idea of a Franklin Valveless Oil Drilling Engine on the job. A neat, clean installation that requires practically no attention for days on end. The Franklin Valveless is fully controlled from the derrick—fast, flexible, powerful, economical.

FRANKLIN VALVELESS ENGINE COMPANY

FRANKLIN, PENNA.

Atlas Supply Company, Muskogee, Oklahoma and Branches
New Martinsville Supply Co., New Martinsville, W. Va.
Bradford Sales Co., Bradford, Penna.

Distributed by
Washington Engine & Pump Co. Washington, Pa.
International Supply Co., Tulsa, Oklahoma and Branches
Wooster Tool & Supply Co., Wooster, Ohio

Atha Supply., Zanesville, Ohio.
McEwen Brothers, Bolivar, N. Y.
American Tank Co. of Colorado, Casper, Wyoming

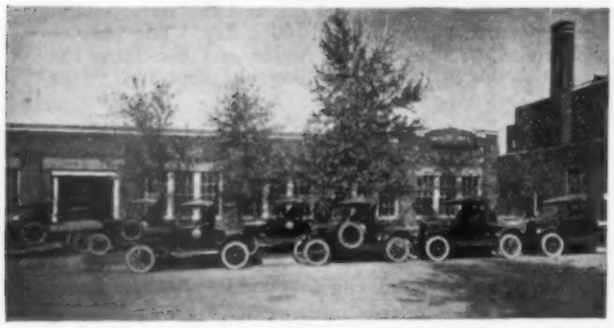
FRANKLIN
VALVELESS ENGINES

THEY BEAT STEAM AT EVERY TURN

Empire Company Has Complete Motor Service Department

A well rounded organization has made reduction of 25 per cent in the cost of operating the company's fleet

By EARL E. IVES
Superintendent of Auto Service Department, Empire Companies



At the left is the Bartlesville garage of the Empire Company and a part of the fleet serviced there. At the right is the Empire Company's private garage at Oil Hill, in the Eldorado Field, Butler County, Kansas

THE fleet of cars and trucks owned and operated by the Empire Gas & Fuel Company of Bartlesville, Okla., is watched with care and the facilities for servicing the fleet are under the direct control of a well defined automobile organization.

Service for a fleet of 350 cars, 100 trucks and trailers and 75 tractors means more than merely making mechanical repairs. It means more than keeping track of a few records on cost of operation. It is not the buying of the new units and selling the old ones that is the valuable service rendered by an automobile department. The service that really affects economy in the operation of a fleet is determining what the most economic life of the various units is apt to be and keeping within the limits of that economic period. It is replacing inefficient equipment with equipment that is best suited for the job. It is holding in service the efficient, but old equipment when the drivers get a taste for new cars or trucks.

The Auto Service Department of the Empire Gas & Fuel Company functions as a service organization in the broad sense of the word. All cars, trucks and tractors are purchased on requisitions issued by that department. All records such as assignments, costs, license, insurance, taxes, budgets, etc., are kept here and combined with mechanical inspection data on operating equipment, making it possible for the efficiency of the fleet to be checked from every possible angle.

Mechanical inspections are made at regular intervals by the inspector working out of the Auto Service Department. The eight private garages maintained for furnishing mechanical repairs to the fleet report daily to the Auto Service Department. The garages are located at centers of operation on the company's properties in Kansas, Oklahoma and Texas.

The fleet is providing transportation for field men in geological survey, land and lease work, oil development, oil pipe line operation, oil refineries, natural gas development, gas pipe line operation, natural gasoline manufacturing, and in several service organizations functioning as a part of the company's activities.

The Empire Gas & Fuel Company does not attempt to take care of all the repair work on the fleet in private garages maintained by the company. Commercial garages are used when distances make it impractical to bring a broken unit to a company shop.

The rate charged for labor at the private garages is less in every company garage than in the commercial garages in the immediate vicinity. This is true because the company garages are operated on a break even basis, that is, no profit is supposed to remain in the operating account of the garage.

Preparation of Estimates

With a complete organization for rendering service to motor units in the company's own service, the Empire Gas & Fuel Company has effected a reduction of 25 per cent in the cost per mile of operating a large fleet. This rather remarkable reduction has been made possible largely through a study of the repairs needed before the job is attempted.

On every job of any size that comes into one of the private garages an estimate of the repairs required is made by the foreman in charge. This estimate contains a separate bill of material on each sub-assembly that is to be repaired and opposite this bill of material is the amount of labor required to put the material into the unit. If the total at the bottom of the estimate sheet is above an established limit, then the approval of the Auto Service Department head is obtained before work begins.

This method of procedure makes possible the elimination of old non-economical units before good money is spent in repairing them. It also makes it possible for the head of the Auto Service Department to confer immediately with the department responsible for getting the unit into bad condition.

Studies of this kind made preliminary to the actual performance of the repair work have been found to be of much more value than comprehensive studies made after the job is completed and the unit is back into service.

Inspection

One of the most important branches of the auto service work is the regular inspection that is given to the fleet. The man making this inspection is a competent automobile mechanic. In the organization he reports to the superintendent of the department. His reports are used in checking requests for new equipment to replace old, giving operating departments detailed information on the possible economic life of the equipment as it becomes worn, and supplying for the insurance department up to date values in case of loss by fire or theft.

The inspector is able to cover the entire fleet once in about 45 days. He leaves a copy of the inspection report in the hands of the truck driver, car driver or tractor operator. Leaving this copy in the hands of the driver has a two fold effect. He not only knows what defects there are in his car or truck, but he also knows that

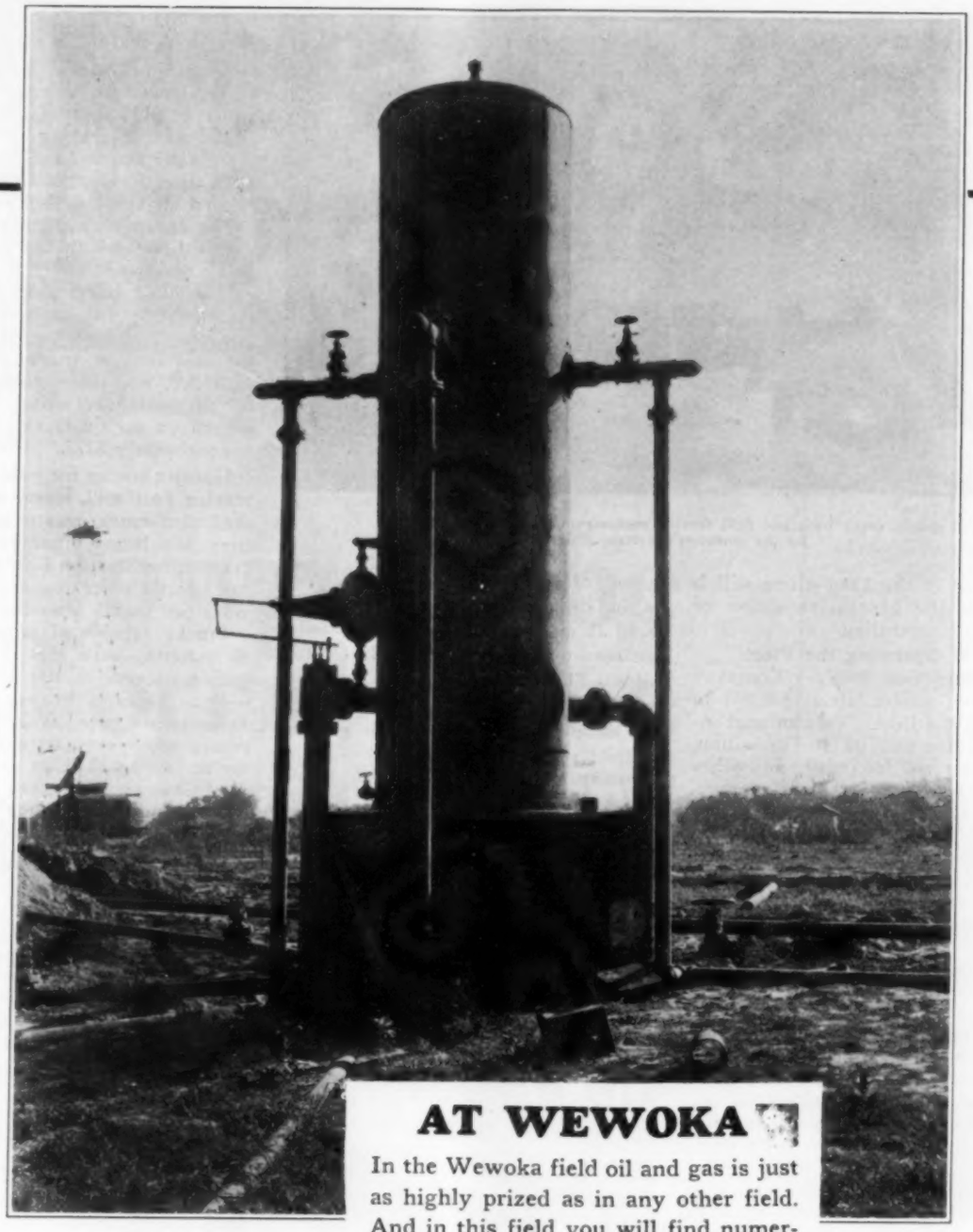


Photo of Type No. 1 Smith Separator on Dixie Oil Co., Wewoka lease.

AT WEWOKA

In the Wewoka field oil and gas is just as highly prized as in any other field. And in this field you will find numerous installations of Smith Separators putting the oil in the stock tanks at casing head gravity—minimizing fire hazard—saving all the gas for the boilers, for the casing head plant or for the pipe lines.

Thus is waste eliminated—values saved—profits increased. Any user will tell you that a Smith Oil and Gas Separator is a profitable investment.

New York Office:
Export Representative:
Oil Field Equipment Co.,
30 Church St., New York
Cable Address:
"Oilfields", New York
California Office:
2039 East 38th St.,
Los Angeles, Calif.

SMITH SEPARATOR COMPANY

Tulsa Okla.

London Office:
Perkins MacIntosh Petroleum
Tool & Boring Co.,
Ltd., 25 Bishopsgate
Cable Address:
"Oleborers", London
Texas Offices:
924 Post-Dispatch Bldg.,
Houston, Texas
1206 F. & M. Bank Bldg.,
Fort Worth, Texas

Say you saw it in The OIL WEEKLY

All special truck beds and field service equipment are built and installed by the company's private shops

his superior in the head office will be informed of the general condition of the unit he is operating.

Cost of Operating the Fleet

The Empire Gas & Fuel Company spends every month about $40,000 in maintaining the fleet. This amount includes gasoline and oil for operation, labor and material for repairs and other such items of expense as tires, storage, insurance, taxes and depreciation, but does not include drivers' salaries or any of the overhead expenses of the department in which the unit chances to work. These costs are carried by cars and the monthly statement of detailed expense is sent back to the driver showing him exactly what the cost of operation on his unit has been for the month.

Sending these statements of detailed cost back to the various drivers is a very important part of the auto service work. The driver pays particular attention to each item of expense and any error in posting on the part of a clerk is immediately brought to the attention of the chief clerk of the division, who immediately takes the matter up with the Auto Service Department for correction. The value of this plan is not correcting mistakes that may have been made in posting, but getting the driver of the car to pay particular attention to his car expense is the important thing. By having in the cost ledger one sheet for each unit that is operating it is possible to make reports of auto expense by divisions, districts, or by the kind of units in such a way that reliable cost figures can be obtained.

With reliable cost figures as a basis the economic value of automobile equipment can be studied for months and years and a definite knowledge obtained as to the best types of equipment for different classes of work as well as the effect that mechanical changes made by manufacturers have in equipment that the company considers as standard.

Period of Service

It has been found that the average period of service for light cars, such as the Empire Company uses, is from 18 to 21 months, with a monthly mileage record averaging from 925 to 1070 miles. The cost of operation per mile is around 7 cents.

A light car with a box bed in general oil field service is expected to cost the company approximately $1500 during its economic life. Considering the life to be 20 months, this gives a monthly figure of $72 for light car service. This figure includes depreciation charges, as well as total cost of gasoline, oil, material for repairs, labor, insurance, registration, and all other items of expense incidental to operation.

The company uses a number of heavier cars, which when equipped for the road, cost approximately $1000. The total cost of operation per mile for these units is found to average between 10 and 11 cents.

A certain fleet of 75 cars of the $1000 class showed an average monthly expense of $112 for the year 1925. This fleet was averaging 992 miles per month per car, and the cars were of all ages from 36 months to 6 months and carried all kinds of bed equipment.

The operating expense of truck units varies directly with the kind of service being performed. A $750 truck, with a cab and bed, being used for light lease maintenance will operate for 10 cents per mile. If pipe line maintenance is the service, a truck costing $1750 equipped, may be expected to operate for 16 cents per mile. The cost per month on such a truck is found to be approximately $175.

Heavier trucks for field and pipe line service cost still more, and are operated at a much greater expense. The tires are larger, fuel consumption is greater, registration fees are higher, repair parts more expensive, and the miles per month lower.

Trucks capable of moving five tons of material with the assistance of a trailer operate in the Empire system with an average expense of from 22 to 23 cents per mile. There are cases on record where such a truck has operated for as low as 20 cents per mile. Road conditions and distances between loading and unloading points are important factors in cost of operation.

Tire Equipment

The Auto Service Department has made a number of detail studies of tires, and changes in tire design and manufacture have been carefully watched from the users' standpoint. It has been found that with few exceptions, balloon tires are as serviceable in all oil field road conditions as

A '26 model Ford roadster equipped for field service turned out by the Bartlesville Shop

Sweating Natives mill their way over narrow paths carrying Axelson Products to final destination.

Down in the Torrid Zone

. . . . . in dense tropical jungles in far-off lands Axelson Pumps are serving—giving the same satisfaction that characterizes their performance in domestic fields.

Our Export Department is at your service

AXELSON MACHINE COMPANY

P. O. Box 337 Los Angeles, California

Tulsa, St. Louis, New York City

Mid-Continent Distributors: Frick-Reid Supply Co.

Eastern Distributors: Frick & Lindsay Co.

AXELSON OIL WELL PUMPS

INTERCHANGEABLE PUMPS for INTERNATIONAL SERVICE

THERE IS NO ECONOMICAL SUBSTITUTE FOR QUALITY

Axelitems

Every part of an Axelson Pump is interchangeable—ideal for international service.

Down on the Equator where Old Sol hits it up to 126° the Boys appreciate the long life of Axelson Pumps. No frequent pulling is necessary.

Preparing Axelson Pumps and Sucker Rods for Over-sea shipments receives a lot of extra attention in our factory.

No complaint has ever been received about the way we pack pumps for export shipment.

The famous Axelson Vanishing Thread in our Sucker Rods is preferred in remote fields too!

More Axelson Sucker Rods are in use than any other type. Such a record speaks for itself.

In 1892—34 years ago—the Axelson factory was established. Been making oil well pumps ever since.

This year our business is greatly surpassing that of 1925 . . . . and 1925 sales were greatly in excess of 1924. In fact every year without exception has shown a steady jump.

May we send our Catalog?

were their predecessor, which carried a much higher air pressure. Scouts and geologists operating in vicinities where thorn-bearing vegetation predominates, find it impossible to use balloon tires. It is necessary in the standard pressure tires which they use to use a layer of steel discs in the tire in order to protect the inner tube from puncture. Before balloon tires came into general use, the Empire drivers were trying to get an average of 12,000 to 14,000 miles per tire. Now they find it possible to get well above this figure before failures develop in the balloon tire equipment.

When Is It Economical to Replace a Unit?

It is not feasible to make a statement as to the exact economic life of any particular kind of automobile or truck. This period varies with the kind of service that the unit renders, the attitude of the driver toward the truck, character of roads, the ability of the unit to carry the load required, and many other similar factors which, if not properly studied, may materially affect the number of days, months or years that an automobile unit can be economically used. It is safe to say, however, that when the volume of mechanical repairs required in order to put the unit into good operating condition equals a certain percentage of the original cost of the unit, then a careful study should be made of the amount of further service demanded from that car or truck. Where the general appearance of the unit is not an important factor, money can be saved by taking care of absolute mechanical needs and omitting such items of repair as painting and polishing. However, this can not be carried to the extreme, for if the general appearance of a car or truck are neglected, the power unit, steering apparatus, and even the tires are in danger of being treated with the same neglect. The Empire Gas & Fuel Company has found that in nearly all cases it is poor economy to spend over 25 per cent of the original cost of an automobile or truck in making repairs necessitated by ordinary wear and tear. If a unit in good repair has been in a wreck or has prematurely failed in some particular part, due consideration must be given to the economic life left in the undamaged parts.

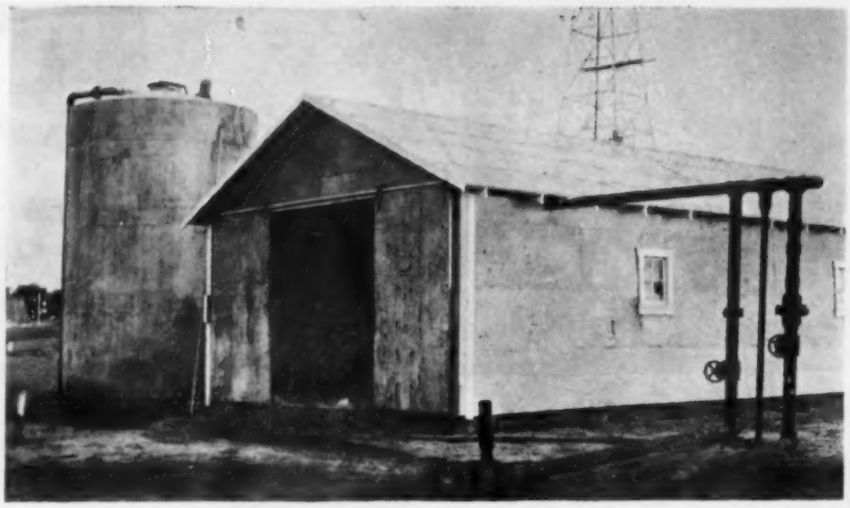
Final Disposition of Used Equipment

What to do with worn out automobile and truck equipment is not the least of the problems of the Auto Service Department. The problem is no less acute with the company than with the average motor car dealer, since it handles a turnover of from 350 to 400 units annually.

The Empire company in disposing of used equipment has sold many of its old cars and trucks to the dealers supplying new and replacement units.

This disposition presents a special problem. The allowance which a dealer can make for an old car or truck

(Continued on page 63.)

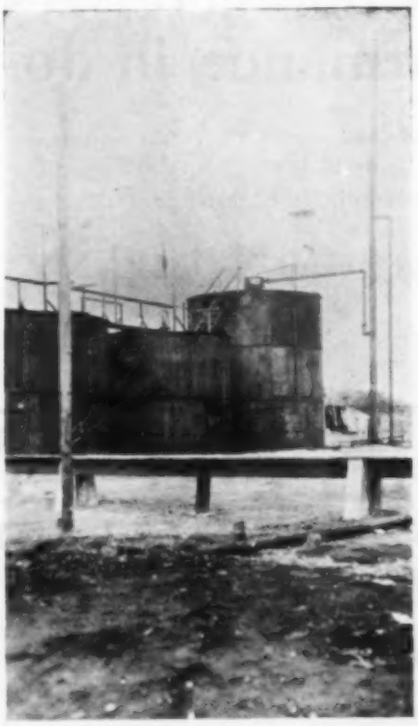


Vacuum station showing lines from tank manifold and also the gas tank

Vacuum Pump Provides Gas Fuel on Sun Lease In Richland, Texas Field

By A. R. McTEE
Staff Representative

OFTENTIMES the expenditure of a small amount of money on a lease to effect some improvement, or make some extra installation, results in substantial economy or saving. Such is the case of The Sun Company, on its Richland lease, at Richland, Texas. By installing a small vacuum station to pull the gas off pumping wells and off the gunbarrel tanks, the company has eliminated a fuel bill of approximately $30 per day. The outfit more than paid for itself during the first month of operation.



Part of vacuum pick-up system showing connection to the tank manifold.

All the wells at Richland make some gas, but not enough to flow. This being the case the gas could not be utilized as fuel, and for considerable time no use was made of it. Other fuel was used for the engines, at a total cost of $30 per day.

Several months ago it was decided to try pulling the gas from each well and from the tanks, putting it under pressure and use it as fuel for the standard pumping outfits.

It was found that the only equipment needed in the installation, not already on the lease, was a vacuum pump. Accordingly an Ingersoll-Rand straight line, belt driven, dry vacuum pump was bought. This was installed with a Bessemer Gas engine to provide the necessary vacuum.

A two-inch line from every well ties into a four-inch line through the lease. There is also a four inch line from the storage tanks to the gas tank.

The gas is pulled off at the well casing-head and at the tank manifold, and forced into the gas storage tank under about two pounds pressure. A line takes the gas from the storage tank to where it is needed on the lease.

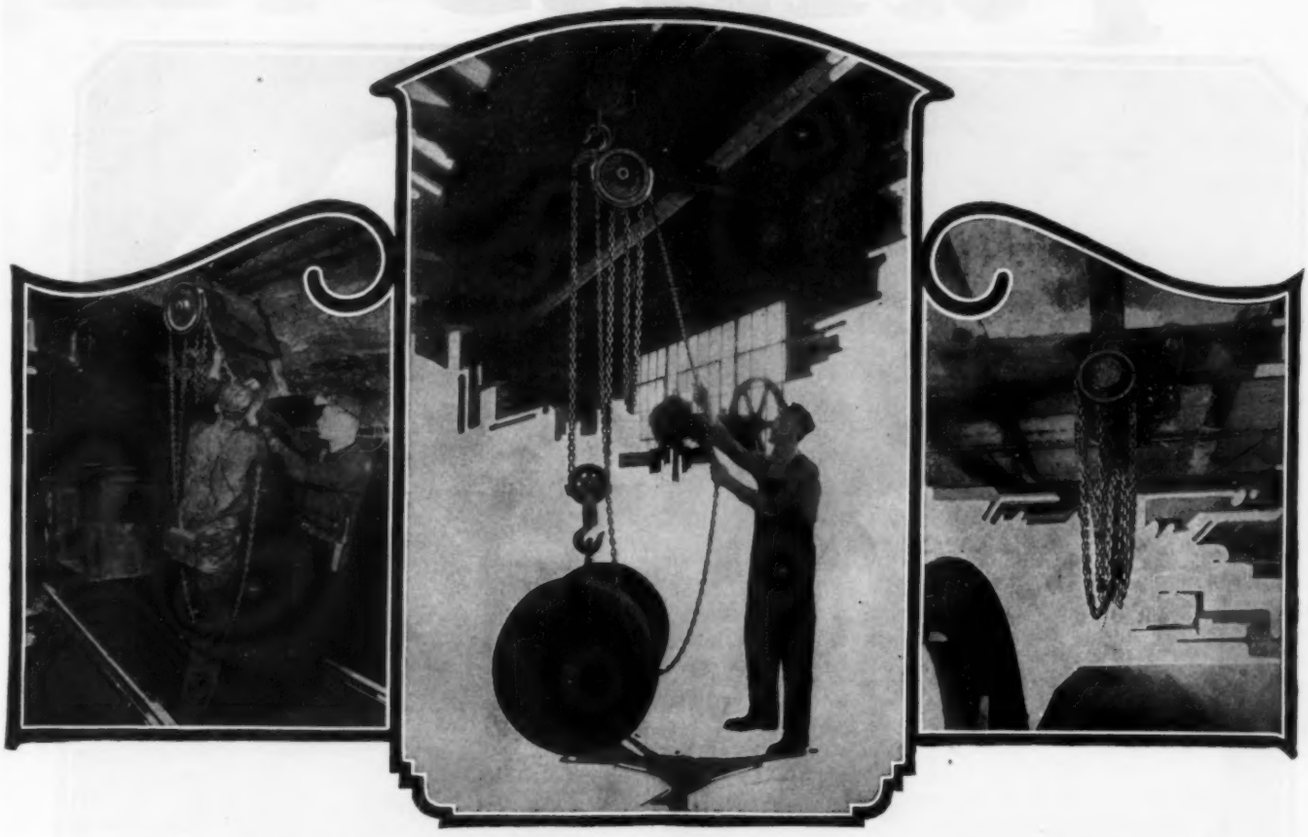
Not more than three points of vacuum are used. In using vacuum at the casing-head, care must be taken not to put a pull on the well sand, or serious damage may be done.

It has been found by experience at Richland that three points will take the gas off both the wells and tanks without interfering with the oil, and as long as no oil appears in the gas line, it is a safe indication that too much vacuum is not being applied.

The vacuum station requires little attention, and is looked after by the pumper as a part of his regular duties.

H. C. England, the Sun Company superintendent in charge of the Richland-Currie-Mexia operations, is responsible for the installation.

TRADE **YALE** MARK



A Record Mine goes to YALE for *Chain Blocks*

The New Orient coal mine has standardized on Yale Chain Blocks. The illustrations above show a few of the many applications—one Yale Block used in hoisting the end of an eight ton locomotive, another in the shop handling heavy car wheels and a third ready for emergencies over the rotary dump.

There's never any question about the safety and reliability of Yale Chain Blocks.

Every Yale Chain Block is continually tested during the process of manufacture and given a final overload test before it leaves the factory.

The Yale Ball Bearing Spur Geared Chain Block is the latest outstanding Yale development. This block is the most efficient on the market—a test proven claim.

Yale hoisting equipment includes Yale Ball Bearing Spur Geared Chain Blocks, Yale Screw Geared Chain Blocks, Yale Differential Chain Blocks, Yale Ball Bearing Electric Hoists, Yale I-Beam Trolleys and Cranes, and Yale Electric Industrial Trucks, Tractors and Trailers.

Ask for the latest bulletins. Yale engineeers are ready at all times to cooperate in any material handling problem.

The Yale & Towne Mfg. Co., Stamford, Conn., U. S. A.

Canadian Branch at St. Catharines, Ont.

YALE MARKED IS YALE MADE

YALE **Hoisting and Conveying Systems**

Say you saw it in The OIL WEEKLY

"Tanks for

LIQUID SAFETY VALVE

Say you saw it in The OIL WEEKLY

r the Buggy ride"!

Storage is an all important feature of the safe and economical transportation of crude~

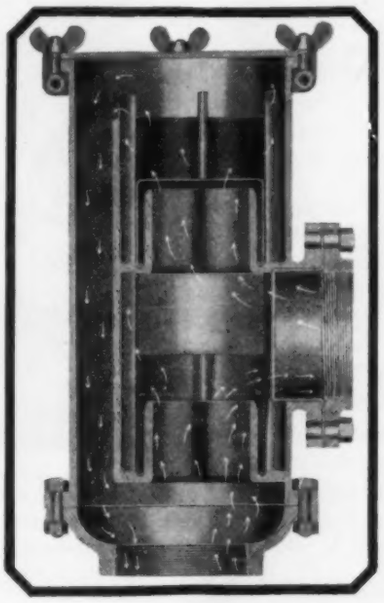
Every pipe line owner and operator must protect his storage facilities. For upon the condition of his storage tanks and equipment largely depends the condition of his crude. With Liquid Safety Valves on every tank roof, you have a three-fold protection that pays big dividends in (1) elimination of losses from evaporation, (2) decrease in fire, wind and lightning hazards and (3) subsequent insurance rate reductions.

Hundreds of installations in every part of the Oil Country on every conceivable type of storage tanks and recovery systems, bear out our claim for the economical and efficient operation of Liquid Safety Valves, no other method has ever been introduced which begins to compare in merit or price. Many thousands of dollars are saved annually by Liquid Safety Valve users; more crude leaves Liquid Safety Valve-equipped tanks in better condition than from tanks equipped by any other method.

Liquid Safety Valves are complete units in themselves and do not require any additional conservation or safety equipment to efficiently and completely eliminate evaporation and to safely decrease fire, wind and lightning hazards. Many large oil companies and pipe line owners who have used Liquid Safety Valves in the past now make it a practice to equip all new tanks, regardless of their roof material, with Liquid Safety Valves because they have satisfied themselves that it is the cheapest form of storage equipment insurance they can buy.

Liquid Safety Valves cost practically nothing for maintenance because they require practically no attention. Their operation is entirely automatic and positive. See panel for operation. We also distribute a complete line of Companion Tank Equipment which includes Davis Supersensitive Relief Valves (for Recovery Systems), Safety Cable Winches, Thief Hatches, Manhole Covers, Sheave Brackets.

An inquiry on your letterhead addressed to any of our offices listed below will bring a representative who will gladly tell you more about Liquid Safety Valves, and what they can do to promote a more ideal condition upon your tanks.



Liquid Seated SAFETY VALVE

Liquid Safety Valves are so designed as to operate at an accumulation of ½ ounce of vacuum or pressure. When such an amount of vacuum or pressure has been set up, two cups, each working against the other, as shown in the diagrammed cut above, immediately relieve the abnormal condition on the tank.

Their action is positive and automatic. Liquid Safety Vales, while eliminating Evaporation, also elminate all losses from mechanical carrying power of wind which might cross an opening on the tank from any direction. They do this by allowing the tank to be kept airtight, with safety.

WESTCOTT & GREIS, Inc.

Conservation and Safety Engineers

Dallas TULSA Los Angeles

ALL TANKS, REGARDLESS OF ROOF MATERIAL, NEED LIQUID SAFETY VALVES!

WESTCOTT & GREIS

CONSERVATION AND SAFETY

Charted Record Kept of Flowing Wells

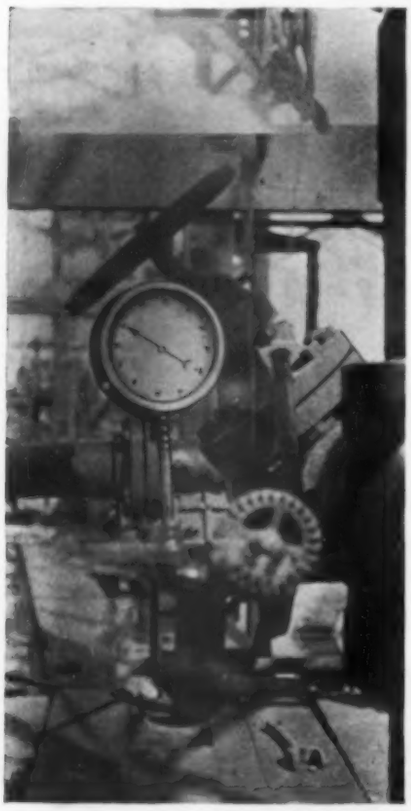
Rio Bravo field superintendents are kept advised on when to change choke by tests

By WALLACE DAVIS
Staff Representative

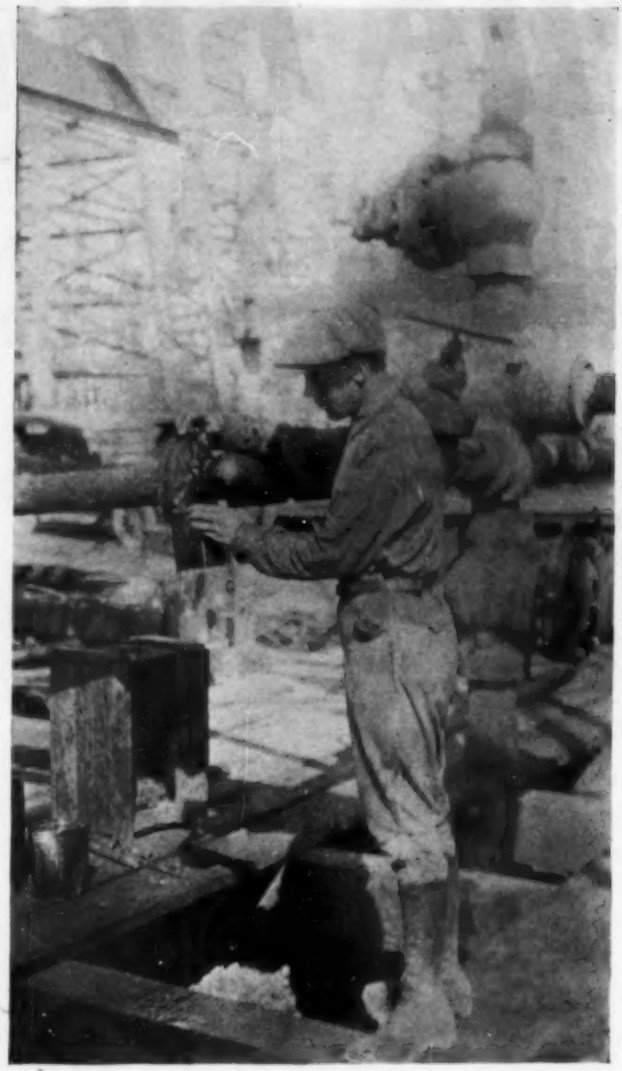
KEEPING in close touch with flowing wells for the purpose of knowing at all times the actual performance of the wells is a policy of Rio Bravo Oil Company that has been followed for the past two years. As a result the production superintendent now has available a chart showing the production, gas pressure, temperature of the crude and b. s. and water content of any flowing well of the company on any day since the adoption of the policy.

The system was incorporated by Rio Bravo at Wortham when the company's Southern Pacific right-of-way lease was producing at its peak. The store of information that it provided for future reference, together with the immediate value the system had for protecting wells against sanding up or turning to salt water, led the company officials to introduce it at Pierce Junction and more recently at Spindletop.

Experts are employed by the company as crude testers, who take samples of oil from each flowing well at certain intervals—usually every two hours on wells flowing pipe line oil and every hour on wells producing an appreciable amount of b. s. or water. Samples of about 100 cubic centimeters are drawn in a small can from a pet cock in the end of the bull plug of the individual wells. After each round of wells on the lease the tester makes an analysis of the samples, and records his results on separate well record sheets. Along with the crude analysis he makes a note of the well pressure, which is taken from the gauge when drawing the samples of oil. The gauge as used by Rio Bravo is a permanent fixture on the well, and is mounted on the fittings. At the end of a given period of one or two weeks the record sheets are sent to the home office at Houston, where a draftsman transfers the well record to individual charts. Throughout the flowing life of the wells each list of records sent in is added to the chart, thereby recording the complete history of each well.



Pressure gauges are used on all flowing wells. An hourly check is made on rock pressure.



Tester taking a sample from a flowing well on the Rio Bravo Oil Company's lease at Spindletop.

Rio Bravo is the only company operating in the Coastal region which is using the above system of testing flowing wells. Two testers are used on each case, working under 12-hour shifts.

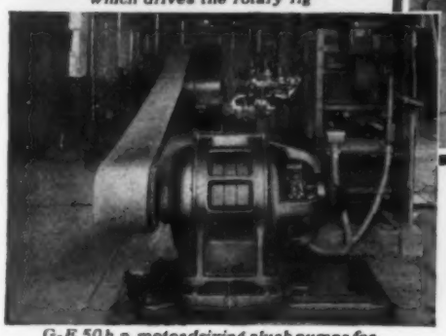
Information on Chart.

On the well record chart curves are drawn showing the trend of production, gas pressure, temperature and the impurities content. With this individual well information the production department can study the performance of wells as to the relation between production and the other factors determining the flow.

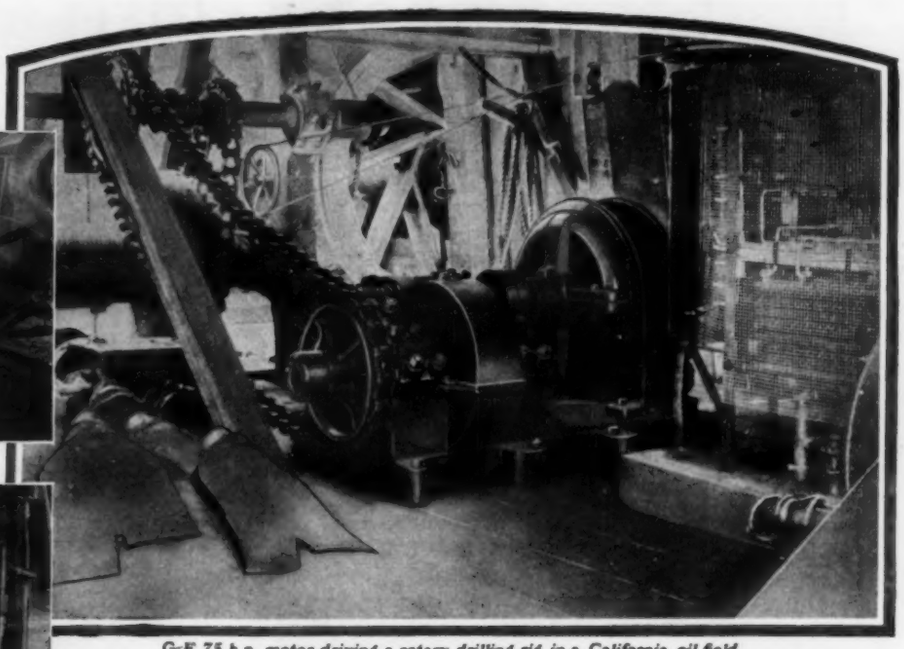
Rio Bravo has found two points of great value in keeping such a system of records on flowing wells. There is an immediate benefit derived—that of keeping the lease foreman constantly informed on what every well is doing. If the tester finds gas pressure decreasing he notifies the foreman and the well can be immediately choked in to a smaller flow, thus giving the well a chance to get the maximum lifting power out of the available gas, since a reduction in the size of the choke increases the back pressure at the bottom of the hole and gets more energy out of the gas per cubic foot.

Another immediate value is seen in the system. The gas pressure might be holding up while the water might be increasing. Here is the operator's chance to reduce the choke and put more back pressure in the bottom of the hole, thus saving the well from going to water. The same increase might be observed in the sand, while if the well were not being closely watched the sand would have a chance

Another view of the G-E motor which drives the rotary rig



G-E 50 h.p. motor driving slush pumps for rotary drilling in a California oil field



G-E 75 h.p. motor driving a rotary drilling rig in a California oil field

Does Your Rotary Rig Waste 82%?

The savings effected on an oil lease by a G-E equipped electric rotary drilling rig are a revelation! Cost records of wells drilled by G-E rotary drilling equipment, compared with those of steam drilled wells in the same field, show savings as high as 82% in power and water alone.

There is no mystery in this. Such savings are logical. Moderate-priced electricity replaces expensive fuel. All the costs of handling, and in many cases of purchasing, boiler feed water are eliminated. Expensive boiler and steam line maintenance is absent. The wear and tear on a compact motor can never approach that on a bulky steam equipment. Power is instantly available at the throw of a switch; rarely occurring troubles can be speedily and simply remedied—and the wells can be drilled faster.

Now that electric driven slush pumps have been perfected, the entire equipment for rotary drilled wells can be electrified. And all the electric equipment can be G-E. These are sound reasons why you should equip your next rotary drilled well with G-E apparatus.

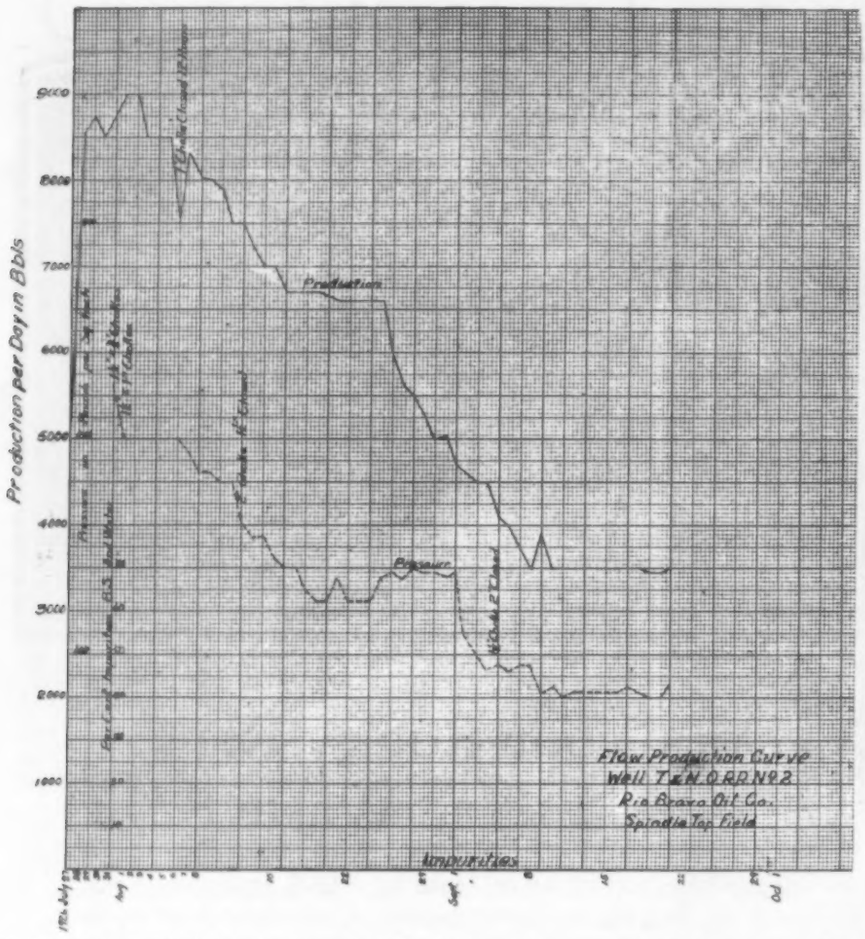
General Electric supplies electrical equipment for all phases of oil field operation. Consider G-E apparatus whenever your requirements are electrical—for G-E installations pay you as surely as good investment bonds.

G-E oil field specialists and complete electrical service at:
Dallas, Denver, Houston, Kansas City, Oklahoma City, Tulsa, Los Angeles, San Francisco

7A-76H

GENERAL ELECTRIC

GENERAL ELECTRIC COMPANY, SCHENECTADY, N. Y., SALES OFFICES IN ALL PRINCIPAL CITIES



to increase until the well was sanded up.

The system of charting the daily performance of wells is invaluable as records. A close study of the charts of old wells has revealed that production curves take the same trend as the pressure curve, even to minute points, while the temperature curve and impurities curve run in opposite directions. As pressure increases the production gains. As the temperature rises it forecasts an increase in water, if water is already present, or the appearance of water if there is none. Likewise, as the water or b.s. content increases, the oil flow decreases. Rio Bravo production men have been able, since the installation of the well record system, to handle wells according to the performance of older wells on the same lease, and thus show in the end a noticeable profit by the use of the record system.

Empire Company Has Complete Motor Service Department

(Continued from page 56.)

depends directly on the salability of that unit. In order, therefore, to get the best allowance out of an old unit, it must be released in a salable condition.

A careful study of this situation has developed several interesting facts. It is not economical to sell a car or truck that can not be demonstrated. It pays to put a good looking spare tire on each car that is offered. In many cases it is most economical to remove the old paint and apply a new coat.

Since the buying public demands that the general appearance be good, it is well to have good headlights on a car, a windshield that is not broken and side curtains in good condition. These, although not expensive to supply, if lacking, affect materially the allowance which a dealer can give for an old unit. A car is never offered if it needs to be washed.

Fair dealing is of paramount importance, the Golden Rule, if you please. Not to be fair is not only unethical, but very impractical. A misstatement on the part of the company's representative when trading with a dealer may obtain a slightly larger allowance in one particular case, but it is sure to lose his friendship. A dealer's friendship and respect is more valuable when future trades arise than a small extra allowance which may be obtained on any one particular deal.

Marland Earnings Same As Last Year

Tulsa, Oklahoma.—Net income of the Marland Oil Company and its subsidiaries for the first nine months of 1926 was $13,719,970, compared with $13,690,029 for the corresponding period of 1925. These totals are after deduction of interest, depreciation and depletion but not federal taxes.

After deduction of estimated taxes, the earning for the period is calculated at $6.74 a share on the 1,885,850 shares of no par stock outstanding.

The statement of E. W. Marland, president of the company, includes the following:

"During the first nine months of the current year the company has expended approximately $23,000,000 on additions to property, and it is estimated that a total of $33,000,000 will be expended on property account during the entire year of 1926.

"The results of these expenditures have been reflected to only a very small degree in the earnings for the first nine months of the year but will be more fully realized next year and thereafter. It is pertinent to point out, however, that the company's production of crude oil has increased from about 27,000 barrels per day in June to over 50,000 barrels per day at the present time.

"The company has proven up valuable properties in the States of Texas and California for future development. Our pipe lines have been extended to handle the Texas production, while all of the company's operating capacity including refining, manufacture of casinghead gasoline, retail distribution of refined products, as well as crude oil purchasing and marketing facilities have been largely increased."

Use Air in Montana

Great Falls, Montana.—Operators in the Kevin-Sunburst field are experimenting with compressors to determine their possibilities toward increasing production. The Ferdig Oil Company has installed a giant compressor with startling results. The production from two wells was almost doubled. Many independent operators have signified their intention of using compressors as the gas pressure declines.

Big Lake Producer

Billings, Mont.—The once despised Big Lake field has again scored with a good completion. The joint test of the Record Petroleum Company and the Delmar Oil Company has been completed as a 100-barrel producer. The Dakota sand was tapped at 3855 feet and drilling suspended at 3920 feet. The Record Petroleum fell heir to leases which had been held practically worthless by larger interests. The company has had a consistent production from two other wells. Several gas wells have been drilled on the structure.

Old Florence Field

Denver, Colo.—The Continental Oil Company has made a new location for a well in the old Florence field, where the company is already heavily interested. This is one of the oldest fields in the United States. It is producing more oil now than at any time since 1916.

Hot Surface Paint withstands 850° fahrenheit!

Hot surfaces can be successfully painted with No. 86 Tnemec Hot Surface Paints. According to tests of the product made by Kansas City Testing Laboratories, Tnemec Paint will withstand 850° Fahrenheit, also rain water striking the hot surface does not injure this paint.

No. 86 Tnemec Hot Surface Paint is quickly and easily applied. It comes in a package ready for use. No thinning required. All rust and scale must be removed before applying the paint and surface should be thoroughly dry. **Can be applied on hot or cold surface and dries to a glossy enamel-like finish.** Made in black only.

No. 86 Tnemec Hot Surface Paint is not sticky, greasy or gummy and flows easily and freely. Will cover solid in one coat at rate of 400 square feet to a gallon.

Use this specialized paint made strictly for hot surfaces and join the legion of satisfied users.

"If CONTINENTAL Sells It There Is No Better"

THE CONTINENTAL SUPPLY COMPANY
General Office: St. Louis
Export Office: 2 Rector Street, New York City
London Office: 316-317 Dashwood House, Old Broad Street, E. C. 2

CONTINENTAL

Say you saw it in The OIL WEEKLY

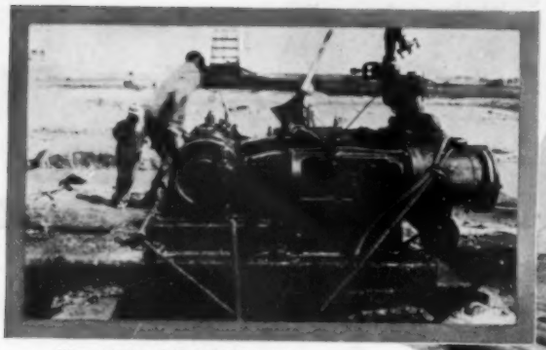
Are You Interested

AJAX Snap Shots

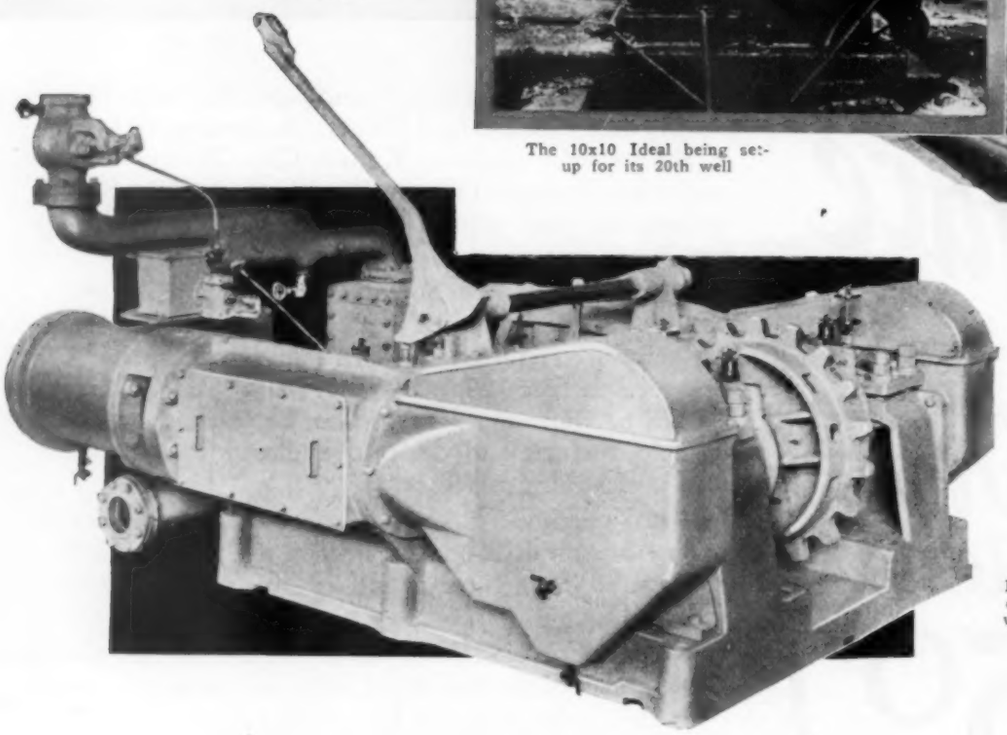
3000 Ft. in 20 Days

Independent Oil & Gas Co.'s Fixico No. 1 Seminole Field. Drilled to 3640 feet with 10x10 Ideal-Twin. Completed with 12x12 Ideal-Twin. Initial production 5560 barrels. Drilled by Reece Drilling Co.

Fixico No. 1 Seminole.



The 10x10 Ideal being set-up for its 20th well



Ideal-Ajax 12x12 Twin ENCLOSED crank case — all important wearing parts splash lubricated.

IDEAL DRILLING

Say you saw it in The OIL WEEKLY

in—Results?

Follow the oil country experience with the Ideal-Ajax Twin Engine.

Its greater power, its smoother operation, its unchallenged performance make it the standard rotary power equipment.

The results given by the Ideal-Ajax Twin Drilling Engine are faster drilling, time and money saved.

Made by

AJAX IRON WORKS

Corry, Pa.

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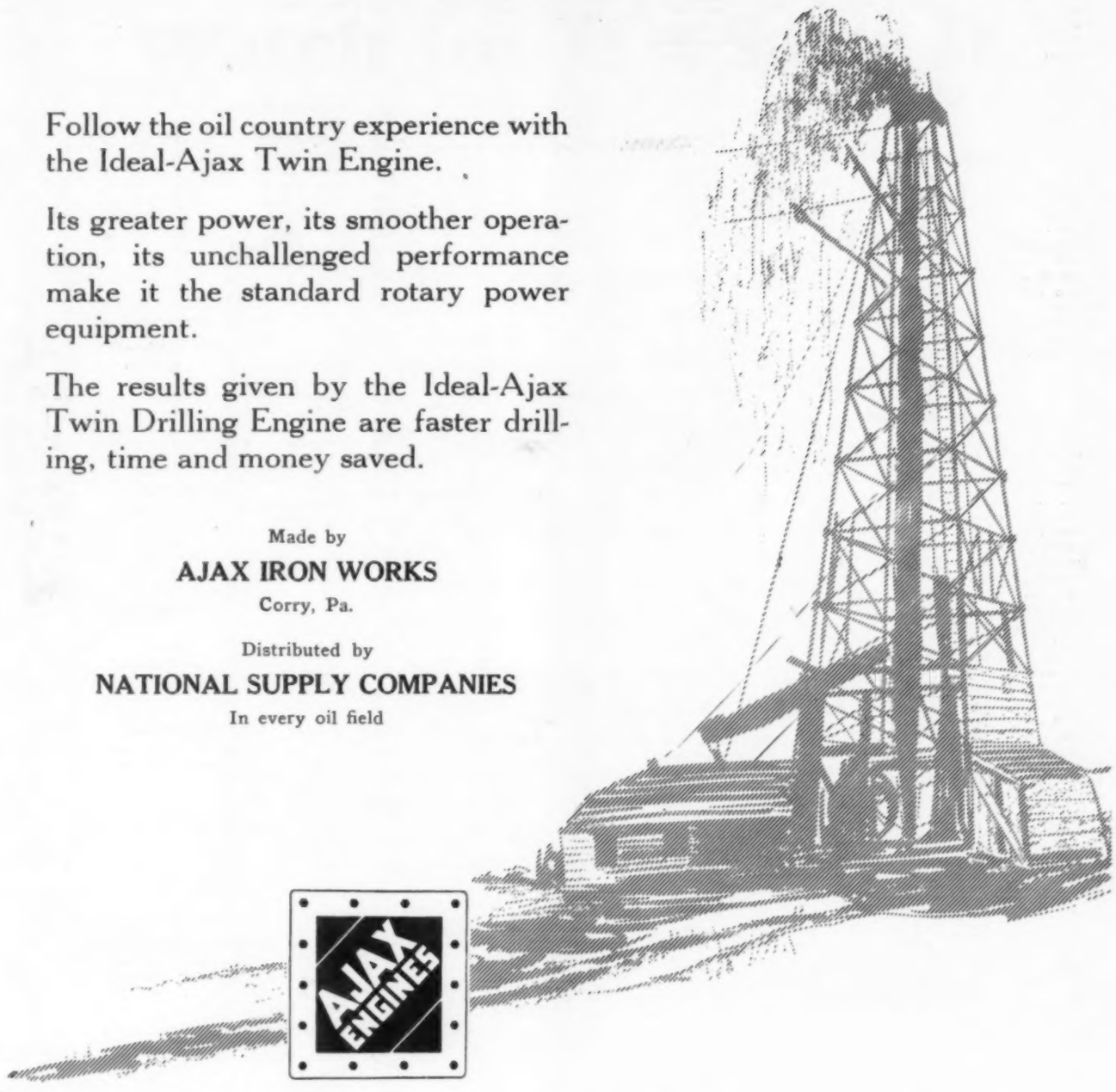
NATIONAL SUPPLY COMPANIES

In every oil field



—AJAX ENGINES

Say you saw it in The OIL WEEKLY

Summary of Field Operations for October

Eastern States

	Completions	Producers	Gas Wells	Failures	Initial Prod.
Pennsylvania	278	225	38	15	2,060
West Virginia	178	56	91	31	549
Kentucky	126	93	4	29	1,296
Ohio	230	141	56	33	3,099
New York	50	50	..	..	150
Tennessee	3	3	..	..	400
Michigan	15	15	..	..	366
Illinois	40	26	..	14	778
Indiana	24	12	4	8	367
Totals	944	621	193	130	9,065

PENNSYLVANIA

Allegheny	2	2	..	..	6
Beaver	1	1	..	..	2
Bradford	152	151	..	1	508
Butler	16	11	2	3	70
Center-Middle	10	8	1	1	97
Clarion	5	2	1	2	7
Crawford	8	8	..	..	341
Greene	42	5	31	6	586
Mercer	1	..	1	..	....
Mt. Jewett	2	2	..	..	60
Venango	37	33	2	2	73
Washington	2	2	..	..	110
Totals	278	225	38	15	2,060

WEST VIRGINIA

Boone	7	..	7	..	..
Braxton	2	..	2	..	..
Cabell	3	1	1	1	8
Calhoun	6	..	6	..	..
Clay	13	13	..	..	220
Doddridge	11	4	4	3	26
Gilmer	6	3	2	1	37
Hancock	1	1	..	..	5
Harrison	11	..	9	2	..
Kanawha	9	..	8	1	..
Lewis	6	..	3	3	..
Lincoln	9	..	9	..	..
Logan	1	..	1	..	..
Marion	8	1	7	..	40
Marshall	5	..	2	3	..
Monongahela	2	..	1	1	..
Mingo	4	2	1	1	30
Pleasants	12	8	1	3	75
Ritchie	25	9	8	8	27
Roane	17	3	14	..	27
Tyler	5	2	1	2	7
Wetzel	7	4	3	..	18
Wirt	2	1	..	1	2
Wood	6	4	1	1	27
Totals	178	56	91	31	549

TENNESSEE

Clay	3	3	..	..	400

ILLINOIS

Clark	6	5	..	1	83
Coles	1	..	..	1	..
Crawford	10	9	..	1	45
Cumberland	3	..	..	3	..
Jasper	2	..	..	2	..
Lawrence	3	2	..	1	65
Marion	1	1	..	..	5
Wabash	14	9	..	5	580
Totals	40	26	..	14	778

INDIANA

Adams	3	2	..	1	135
Blackford	1	..	..	1	..
Daviss	3	1	..	2	15
Gibson	1	..	1	..	..
Huntington	1	1	..	..	20
Jay	2	1	..	1	10
Knox	2	1	..	1	5
Madison	1	..	1	..	..
Pike	5	5	..	..	181
Shelby	1	..	1	..	..
Sullivan	2	1	1	..	1
Warrick	1	..	..	1	..
Wells	1	..	..	1	..
Totals	24	12	4	8	367

NEW YORK

Allegany	50	50	..	..	150

OHIO

	Completions	Producers	Gas Wells	Failures	Initial Prod.
Allen	2	2	..	..	14
Ashland	9	1	7	1	8
Ashtabula	1	..	1	..	..
Athens	17	6	6	5	20
Belmont	4	3	..	1	16
Columbiana	3	3	..	..	6
Coshocton	6	4	2	..	456
Cuyahoga	8	..	7	1	..
Darke	1	1	..	..	6
Fairfield	1	..	..	1	..
Guernsey	1	..	..	1	..
Hancock	4	4	..	..	56
Hardin	3	3	..	..	70
Harrison	2	1	..	1	2
Hocking	18	14	1	3	502
Holmes	11	7	1	3	345
Jefferson	3	3	..	..	19
Knox	9	6	2	1	88
Licking	22	21	1	..	661
Lorain	1	..	..	1	..
Lucas	1	1	..	..	5
Medina	8	4	4	..	77
Meigs	3	2	..	1	5
Mercer	4	4	..	..	32
Monroe	5	4	..	1	8
Morgan	14	9	5	..	84
Muskingum	1	1	..	..	65
Noble	6	6	..	..	20
Ottawa	2	2	..	..	27
Perry	4	1	1	2	202
Sandusky	6	6	..	..	35
Selby	2	2	..	..	45
Vinton	3	3	..	..	7
Washington	32	12	14	6	61
Wayne	7	..	4	3	..
Wood	6	5	..	1	157
Totals	230	141	56	33	3,099

MICHIGAN

Saginaw	14	14	..	..	363
St. Clair	1	1	..	..	3
Totals	15	15	..	..	366

KENTUCKY

Allen	9	6	..	3	12
Barren	31	28	..	3	404
Christian	1	..	..	1	..
Cumberland-Monoroe	3	2	..	1	250
Estill	8	7	..	1	60
Floyd-Knott	2	1	1	..	25
Johnson-McGoffin	4	2	1	1	28
Lawrence-Johnson	14	14	..	..	111
Lee-Owsley	6	2	2	2	8
Morgan	3	3	..	..	7
Owensboro	28	17	..	11	201
Simpson	1	..	..	1	..
Warren	11	8	..	3	172
Wayne	4	2	..	2	3
Wolfe	1	1	..	..	15
Totals	126	93	4	29	1,296

California

	Completions	Producers	Gas Wells	Failures	Initial Prod.
Long Beach	22	20	..	2	2,985
Athens-Rosecrans	2	1	..	1	1,000
Dominguez	1	1	..	..	380
Elk Hills	1	1	..	..	160
Bildwin Hills-Inglewood	4	4	..	..	851
Torrance-Redondo	4	4	..	..	550
Huntington Beach	13	13	..	..	13,405
Hovey Hills	1	1	..	..	20
Brea-Richfield	7	7	..	..	3,741
Rideout Heights	2	2	..	..	135
Midway	9	9	..	..	1,185
Kern Front	1	1	..	..	212
Seal Beach	1	..	..	1	..
Sunset	4	4	..	..	548
Ventura Avenue	2	2	..	..	8.050
Poso Creek	7	3	..	4	405
Santa Barbara	2	2	..	..	900
Wheeler Ridge	1	1	..	..	212
Wildcats	5	3	..	2	209
Totals	89	79	..	10	34,948

Mountain States

	Completions	Producers	Gas Wells	Failures	Initial Prod.
Wyoming	44	38	..	6	5,435
Montana	38	27	..	11	6,645
Colorado	2	1	..	1	700
New Mexico	12	6	..	6	360
Totals	96	72	..	24	13,140

WYOMING

Brenning Basin	1	..	..	1	..
Ferris	1	1	..	..	25
Geary Dome	1	..	..	1	..
Grass Creek	2	2	..	..	1,100
Lance Creek	1	1	..	..	100
Lost Soldier	1	1	..	..	210
Poison Spider	1	1	..	..	175
Rock Creek	1	1	..	..	110
Salt Creek	32	31	..	1	3,715
West Salt Creek	1	..	..	1	..
Wildcats	2	..	..	2	..
Totals	44	38	..	6	5,435

NEW MEXICO

Eddy County	3	3	..	..	225
Table Mesa	4	3	..	1	135
Guadalupe	1	..	..	1	..
Wildcats	4	..	..	4	..
Totals	12	6	..	6	360

MONTANA

Kevin-Sunburst	36	26	..	10	6,605
Cat Creek	1	1	..	..	40
Mackay	1	..	..	1	..
Totals	38	27	..	11	6,645

COLORADO

Moffatt	1	1	..	..	700
Wildcats	1	..	..	1	..
Totals	2	1	..	1	700

Arkansas

Field—	Completions	Producers	Gas Wells	Failures	Initial Prod.	Monthly Prod.
El Dorado	..	..	..	..	....	212,660
Nevada	..	..	..	..	....	58,280
Lisbon	39	35	2	2	779	240,560
Smackover	48	36	2	10	3,545	4,009,670
Stephens	3	3	..	..	55	50,530
Wildcats	8	..	..	8	....	.....
Totals	98	74	4	20	4,379	4,571,700

North Louisiana

Field—	Completions	Producers	Gas Wells	Failures	Initial Prod.	Monthly Prod.
Bellvue	4	2	1	1	37	64,790
Caddo Parish	22	15	1	6	4689	388,430
Crichton	..	..	..	..	....	.....
Homer	..	..	..	..	....	173,290
Cotton Valley	3	1	2	..	135	231,260
Monroe	6	..	6	..	....	.....
Urania	24	20	..	4	3730	491,350
DeSoto-Red River	..	..	..	..	....	124,930
Elm Grove	1	..	1	..	....	16,740
Haynesville	..	..	..	..	....	286,440
Wildcats	18	..	..	18	....	.....
Totals	78	38	11	29	8591	1,777,230
La. Gulf Coast	11	8	..	3	2395	376,340
La. Totals	89	46	11	32	10986	2,153,570

LOUISIANA GULF COAST

Vinton	5	4	..	1	2,395	187,240
Evangeline	4	2	..	2	265	34,410
Edgerly	1	1	..	..	15	30,070
Lockport	1	1	..	..	500	124,620
Totals	11	8	..	3	2,395	376,340

Watch for It • Save It

OIL SUPPLY CATALOGS are probably the most complete catalogs in the world, but it is a fact that the compiling and printing of an ordinary supply catalog involves a tremendous amount of time as well as expense.

The time element alone prevents catalogs being issued annually or semi-annually.

That is why there is a distinct use for *The* OIL WEEKLY'S ANNUAL NEW AND IMPROVED EQUIPMENT ISSUE. This issue, which will be out DECEMBER 3RD, will in effect be a catalog of all of the new and improved equipment that we have been able to get data on over the past 12 months.

Watch for It • Save It

KANSAS PRODUCTION SUMMARY FOR OCTOBER

Field—	Daily Av.	Total
Florence-Covert	1,970	61,070
Peabody-Elbing	4,170	129,270
Eldorado-Towanda	13,770	426,870
Augusta-Fox-Bush	4,950	153,450
Rainbow Bend	3,580	110,980
Russell	4,630	143,530
Greenwood	44,940	494,340
Other fields	36,610	1,134,910
Totals		2,654,420

Kansas

Field—	Completions	Producers	Gas Wells	Failures	Initial Prod.
Butler	21	14	..	7	2,245
Elk	5	2	..	3	115
Morrise	3	..	2	1	....
Cowley	13	11	..	2	1,509
Greenwood	79	57	..	22	6,130
Marion	2	1	..	1	340
Sumner	9	6	..	3	4,309
Hughes	2	..	1	1	....
Graham	1	..	..	1	....
Coffey	3	..	..	3	....
Chase	4	..	..	4	....
Chautauqua	3	..	..	3	....
Rook	2	..	..	2	....
Pottawatomie	1	..	..	1	....
Jefferson	1	..	..	1	....
Russell	3	3	..	..	660
Rice	2	1	..	1	75
Lyon	10	4	..	6	335
Total	164	99	3	62	15,718

OKLAHOMA PRODUCTION SUMMARY FOR OCTOBER

Field—	Daily Av.	Total
North Braman	15,170	470,270
South Braman	6,850	212,350
Blackwell	4.050	125,550
Hubbard	2,740	84,940
Thomas	1,930	59,830
Tonkawa	36,360	1,127,160
Garber	26,120	809,720
Burbank	47,770	1,480,870
Osage (outside Burbank)	34,400	1,066,400
Watchorn	4,200	130,200
Cushing	21,490	666,190
Yale-Jennings	13,750	416,250
Davenport	5,550	172,050
North Okmulgee	17,490	542,190
Bristow-Slick	27,280	845,680
Lyons-Deaner	3,740	115,940
Stroud	2,030	62,930
Cromwell	15,280	473,680
Papoose	9,670	299,770
Wewoka	27,080	839,480
Duncan District	7,390	229,090
Graham	10,350	320,850
Fox	6,290	194,990
Healdton	15,690	516,390
Hewitt	11,280	349,680
Seminole	41,150	1,275,650
Other fields	6,708	2,079,480
Totals		14,967,580

Oklahoma

State—	Completions	Producers	Gas Wells	Failures	Initial Prod.
Carter	30	21	3	6	4,247
Creek	73	49	5	19	6,873
Garfield	31	16	1	14	1,388
Hughes	11	4	..	7	2,243
Muskogee	12	4	..	8	629
Okfuskee	14	7	2	5	630
Okmulgee	34	14	4	17	1,474
Osage	82	63	3	16	15,333
Pawnee	8	5	1	2	531
Payne	15	9	1	5	998
Seminole	44	33	4	7	65,887
Tulsa	19	9	3	7	800
Grant	3	1	..	2	53
Grady	10	7	..	3	605
Lincoln	14	5	..	9	668
Sequoyah	2	..	..	2	....
Stephens	12	3	2	7	40
Wagoner	11	..	1	10	....
Cotton	1	..	..	1	....
Rogers	2	..	..	2	....
McIntosh	1	..	..	1	....
Jefferson	1	..	..	1	....
Canadian	1	..	..	1	....
Blain	1	..	..	1	....
Kingman	2	..	..	2	....
Love	1	..	..	1	....
Kay	24	19	1	4	12,257
Noble	9	2	1	6	12
Comanche	2	..	..	2	....
Latimer	1	..	..	1	....
Kingfisher	1	..	..	1	....
Dewey	1	..	..	1	....
Caddo	2	2	..	..	100
Pittsburg	1	..	..	1	....
Pontotoc	2	..	1	1	....
Garvin	1	..	..	1	....
Totals	480	273	33	174	115,168

Texas

	Completions	Producers	Gas Wells	Failures	Initial Prod.	Monthly Prod.
North Texas	514	385	4	125	115,142	7,657,780
Central and W. Texas	307	187	5	115	32,202	2,824,720
E Cen Texas	39	22	..	17	7,255	1,727,196
Gulf Coast	98	73	..	25	94,100	4,933,340
S. W. Texas	29	20	9	..	2,403	1,367,410
E. Texas	3	1	2	..	10	.....
Totals	990	688	20	282	251,112	18,510,446

NORTH TEXAS

Archer Co.	113	76	..	37	14,610	993,620
Burkburnett	21	15	..	6	1,847	398,040
Clay Co.	7	3	..	4	29	20,150
Cooke Co.	18	13	..	5	715	.....
Electra	25	20	..	5	495	502,220
Hutchinson County	105	97	..	8	78,425	4,405,500
Jack Co.	4	1	..	3	110	.....
K-M-A and Iowa Park	20	12	..	8	855	123,070
Montague Co	70	60	1	9	3,720*	213,280
Panhandle Misc'll'us	28	24	2	2	10,991†	339,450
South Vernon District	36	33	..	3	2,075	430,280
Throckmorton County	7	1	1	5	30‡	.....
Young Co.	60	30	..	30	1,240	210,180
Others	..	..	..	..	....	22,010
Totals	514	385	4	125	115,142	7,657,780

*Includes 65,000,000 feet gas.
†Includes 54,000,000 feet gas.
‡Includes 7,000,000 feet gas.

CENTRAL AND WEST TEXAS

Big Lake	9	9	..	..	1,485	903,030
Callahan Co.	21	13	..	8	475	128,650
Coleman Co.	9	1	..	8	25	52,700
Crane Co.	12	11	..	1	3,840	.....
Desdemona-Comanche	..	..	..	..	....	53,320
Eastland Co.	15	3	2	10	95*	173,600
Howard Co.	2	2	..	..	180	.....
Mitchell Co.	..	..	..	..	....	116,870
Palo Pinto County	2	..	1	1	....†	12,710
Shackelford County	57	32	..	25	4,970	266,290
Stephens Co.	15	7	2	6	445‡	335,730
Upton Co.	39	38	..	1	11,585	.....
Crane-Upton	..	..	..	..	....	347,200
Others	..	..	..	..	....	347,200
Wildcats	28	1	..	27	7	.....
Totals	307	187	5	115	32,202	2,829,730

*Includes 5,500,000 feet gas.
†Includes 4,500,000 feet gas.
‡Includes 23,500,000 feet gas.

EAST CENTRAL TEXAS

Corsicana-Powell	..	..	..	..	....	765,266
Currie	..	..	..	..	....	23,560
Mexia	..	..	..	..	....	347,510
Nigger Creek	30	22	..	8	7,255	360,840
Richland	..	..	..	..	....	41,850
Wortham	..	..	..	..	....	188,170
Wildcats	9	..	..	9	....	.....
Totals	39	22	..	17	7,255	1,727,196

EAST TEXAS

Marion Co.	1	1	..	..	10	.....
Panola Co.	2	..	2	..	....	.....
Totals	3	1	2	..	10	.....

TEXAS GULF COAST

Field—	Completions	Producers	Gas Wells	Failures	Initial Prod.	Monthly Prod.
Barbers Hill	1	1	..	..	300	.....
Batson	5	5	..	..	206	47,740
Big Creek	..	..	..	..	....	35,340
Blue Ridge	1	1	..	..	700	52,080
Boling	..	..	..	..	....	68,820
Damon Md.	..	..	..	..	....	30,690
Goose Creek	7	5	..	2	740	271,560
Hull	11	9	..	2	11,250	664,640
Markham	..	..	..	..	....	.....
Humble	..	..	..	..	....	118,420
Nash Dome	..	..	..	..	....	.....
Orchard	..	..	..	..	....	.....
Orange	9	6	..	3	1,095	221,960
Pierce Jct.	7	7	..	..	7,069	89,280
Saratoga	1	..	..	1	....	39,060
Spindletop	32	26	..	6	65,770	2,590,050
S. Liberty	2	..	..	2	....	125,860
Sour Lake	12	11	..	1	6,980	248,000
W. Columbia	..	..	..	..	....	271,560
Wildcats	10	2	..	8	....	.....
Others	..	..	..	..	....	58,280
Totals	98	73	..	25	94,100	4,933,340

SOUTHWEST TEXAS

Duval C'nty	2	1	1	..	278	2,480
Laredo Dist*	..	..	..	..	....	527,930
Jim Hogg County	14	11	3	..	1,150	.....
Webb County	2	8	4	..	1,075	.....
Lytton Sprgs	..	..	..	..	....	112,840
Medina Co.	1	..	1	..	....	.....
Luling	..	..	..	..	....	646,660
Somerset	..	..	..	..	....	61,070
Others	..	..	..	..	....	16,430
Totals	29	20	9	..	2,403	1,367,410

*Includes Jim Hogg and Webb Counties.

Open in Fort Worth

Fort Worth, Texas—The Adams Royalty Company of Chicago has established a branch office in the F. & M. Bank Building, with J. B. Wheeler in charge, and has become very active in royalty purchases in North and West Texas. The Adams Royalty Company acquired the Northern Royalty Company, an Oklahoma concern, some months ago at a large cash price.

Charles E. Markey of The Link-Belt Company, who makes his home office in Indianapolis, has returned home after a six weeks tour of the Mid-Continent field.

Amarillo's
Two Great Hotels

Amarillo Hotel
400 rooms—300 baths

Now Open—Rates $2.50 Up

Herring Hotel
600 rooms—600 baths

Open Jan. 1, 1927—Rates $2.50 Up

Address communications to Ernest O. Thompson, Amarillo, Texas, President of both hotels

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Made in sizes to fit 6⅝, 8, 10, 12 and 12½-inch casing

Write for prices and specifications

Manufactured by

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HOUSTON, TEXAS

AVERAGE DAILY PRODUCTION FOR U.S.

United States Daily Average Production by Weeks

Figures below are taken from the complete revised estimates of the AMERICAN PETROLEUM INSTITUTE except for the current week, which are advance estimates issued by the A. P. I. and are subject to revision:

Week Ending	Oklahoma	Kansas	Texas (Outside Gulf Coast)	Gulf Coast	North Louisiana	Arkansas	Eastern States	Rocky Mountain	California	United States Total
February	450,037	101,937	245,989	91,550	45,090	169,676	99,000	98,412	605,250	1,909,637
March	454,762	103,300	260,262	92,712	48,787	165,312	97,625	102,325	604,500	1,929,562
April	467,175	101,825	263,612	88,812	50,562	169,824	100,875	106,675	600,000	1,947,387
May	463,750	105,690	277,700	94,550	58,150	175,430	105,700	112,300	602,720	1,995,990
June	456,450	107,637	302,187	89,912	60,412	167,887	106,250	112,925	606,925	2,013,187
July	456,920	110,320	336,600	114,760	57,460	161,870	104,700	108,520	613,940	2,062,470
August	465,137	111,600	381,560	161,237	56,787	157,375	108,350	110,737	609,725	2,162,662
September	465,387	113,037	402,212	175,512	56,575	154,037	110,125	105,825	598,100	2,180,862
October 2	470,500	115,150	413,250	174,400	58,200	151,100	110,000	101,650	600,000	2,194,250
October 9	474,950	114,800	430,350	167,450	57,900	150,150	109,500	96,600	602,500	2,204,200
October 16	486,150	114300	443,050	166,750	57,000	149,900	109,000	99,700	608,300	2,234,150
October 23	514,700	114,600	451,350	172,000	58,450	149,850	109,000	97,400	618,900	2,286,250
October 30	539,300	114,750	459,450	171,150	59,450	148,050	110,000	99,950	628,300	2,330,400
Increase over past week	24,600	150	8,100	.....	1,000	.....	1,000	2,550	9,400	44,150
Decrease over past week	.....	.....	.....	850	.....	1,800	.....	.....	.....	.....

Texas

NORTH TEXAS

	Oct. 30	Oct. 23
Burkburnett	13,800	13,750
Electra	16,500	16,600
Iowa Park-K-M-A	3,900	3,800
Wilbarger	14,200	14,000
Hutchinson County	146,400	147,950
Panhandle Misc.	13,200	14,000
Montague County	9,350	8,300
Archer County	33,600	32,500
Others	900	850
Totals	251,850	252,450

EAST CENTRAL TEXAS

Mexia	11,200	11,200
Currie	750	750
Richland	1,350	1,350
Corsicana-Powell	24,400	24,200
Wortham	6,200	6,000
Nigger Creek	14,600	11,800
Totals	58,500	55,300

WEST CENTRAL TEXAS

Stephens County	10,800	10,700
Eastland County	5,500	5,450
Desdemona	1,800	1,700
Young County	7,350	7,100
Palo Pinto County	400	400
Callahan County	4,100	4,100
Shackelford County	9,350	8,950
Reagan County	30,350	29,800
Brown County	12,750	12,650
Coleman County	1,600	1,600
Crane-Upton Counties	16,100	11,850
Mitchell County	3,700	3,700
Others	2,800	2,800
Totals	106,600	100,800

SOUTHWEST TEXAS

Luling	20,300	20,450
Laredo District	16,100	16,250
Somerset	1,950	1,950
Lytton Springs	3,600	3,600
Piedras Pintas	50	50
Others	500	500
Totals	42,500	42,800
Totals Texas outside Gulf Coast	459,450	451,350

GULF COAST

Goose Creek	7,300	7,450
Hull	21,250	22,700
Saratoga	1,250	1,250
Blue Ridge	2,000	1,850
Damon Mound	1,050	1,000
Batson	1,650	1,600
West Columbia	8,050	8,700
Humble	3,950	3,800
Pierce Junction	5,050	5,200
Sour Lake	5,100	7,900
Spindletop	86,400	82,900
Orange County	6,450	6,650
Edgerly	850	850
Evangeline	1,250	1,250
Vinton	5,800	5,800
Lockport	3,550	4,100
South Liberty	4,200	3,650
Big Creek	1,350	1,250
Boling	2,650	2,150
Others	2,000	1,950
Totals	171,150	172,000

Oklahoma

North Braman	22,800	23,550
South Braman	6,300	6,450
Blackwell	3,850	3,850
Hubbard	2,700	2,600
Thomas	2,150	2,000
Tonkawa	35,100	32,250
Garber	23,750	24,650
Burbank	48,650	49,100
Osage (outside Burbank)	34,200	34,300
Watchorn	3,900	3,950
Cushing	21,450	21,500
Yale Jennings	13,450	13,350
Davenport	5,600	5,650
Bristow-Slick	27,050	27,100
North Okmulgee	17,400	17,450
Lyons-Deaner	3,950	3,950
Stroud	1,900	2,000
Cromwell	14,850	15,150
Papoose	9,300	9,200
Wewoka	26,200	26,550
Duncan District	7,300	7,350
Graham	10,600	10,650
Fox	6,500	6,500
Healdton	14,750	14,950
Hewitt	10,950	11,150
Seminole	97,850	69,600
Others	66,750	66,900
Totals	539,300	514,700

California

Santa Fe Springs	47,500	47,500
Long Beach	95,000	95,000
Huntington Beach	68,000	60,000
Torrance	27,000	27,000
Dominguez	21,500	21,500
Rosecrans	14,000	14,000
Inglewood	40,000	41,000
Midway-Sunset	94,000	94,000
Ventura Avenue	52,300	49,900
Others	169,000	169,000
Totals	628,300	618,900

Kansas

Florence-Covert	1,950	1,950
Peabody-Elbing	4,100	4,100
El Dorado-Towanda	13,650	13,700
Augusta-Fox-Bush	5,000	5,000
Rainbow Bend	3,300	3,400
Russell	4,400	4,500
Greenwood County	45,300	44,750
Others	37,050	37,250
Totals	114,750	114,600

North Louisiana

	Oct. 30	Oct. 23
Homer	5,500	5,550
Haynesville	9,100	9,100
Caddo Light	11,050	9,850
Caddo Heavy	4,050	4,450
De Soto-Red River	4,150	4,050
Elm Grove	550	550
Bellevue	2,100	2,100
Cotton Valley	7,450	7,550
Urania	15,500	15,250
Totals	59,450	58,450

Arkansas

El Dorado	7,050	6,800
Smackover Light	13,900	13,800
Smackover Heavy	116,650	118,350
Stephens	1,550	1,550
Nevada	1,850	1,800
Lisbon	7,050	7,550
Totals	148,050	149,850

Mountain States

WYOMING

Salt Creek	47,350	45,150
Grass Creek	3,100	3,100
Elk Basin	750	850
Big Muddy	3,300	3,200
Lost Soldier	5,350	5,150
Rock River	3,000	2,950
Teapot Dome	1,000	1,050
Lance Creek	1,000	1,000
Others	2,200	2,200
Totals	67,050	64,650

MONTANA

Cat Creek	2,500	2,500
Sunburst	18,000	18,000
Others	250	250
Totals	20,750	20,750

COLORADO

Moffats (Craig)	2,800	2,850
Fort Collins	3,500	3,450
Florence	550	450
Others	750	750
Totals	7,550	7,500

NEW MEXICO

Table Mesa	250	250
Artesia	3,000	3,000
Hogback	800	700
Rattlesnake	550	550
Totals	4,600	4,500
Total, Mountain States	99,950	97,400

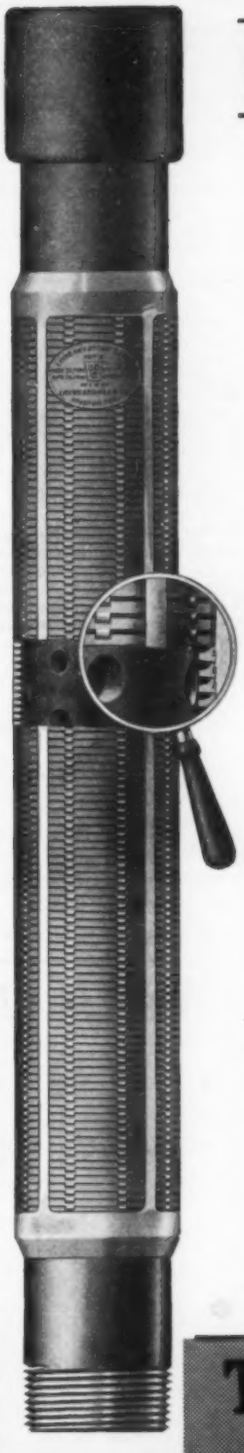
Eastern States

Including Ill., Ind., Ohio, Pa., W. Va., Ky. and N. Y.	110,000	109,000

PRODUCTION SUMMARY

East of Rockies	1,602,150	1,569,950
United States	2,330,400	2,286,250

THE LAYNE KEYSTONE WIRE WRAPPED SCREEN



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CRUDE OIL PRICE QUOTATIONS

Crude Price Changes

November 1.—Effective at the opening of the market today, Humble Oil & Refining Company posted a revision of its crude prices on North and Central Texas, changing the differential between the different gravity grades to five cents. This resulted in a reduction ranging from 15 cents on the lowest grades posted by Humble, to 87 cents on the highest grade.

On November 2, Carter Oil Company changed its schedule to conform with Humble's in Oklahoma and Kansas.

Magnolia Petroleum Company also met the cut on November 2, on all crude it buys in Oklahoma, Kansas, and North and Central Texas. Magnolia kept its old posting of $1.30 on below 28 gravity. Beginning with 28 to 28.9 Magnolia follows Humble's schedule.

No other companies had met the cut November 3.

Humble's statement in connection with the cut follows:

"The effect of increased crude oil production and the number and extent of important new producing areas in Texas and other parts of the United States has resulted in lower prices in the world's markets for various petroleum products. This fact, coupled with the necessity on the part of this company and the entire industry for storing some additional crude oil in the face of present more than ample stocks, not only warrants but dictates a reduction in the price of crude. This is emphasized by the fact that this situation comes on us at a time when the consumption of gasoline, our principal product, is starting its usual winter decline.

"Refinery experience, supported by numerous laboratory tests on crude of different gravities over a long period, indicate to us that a 5 cent differential per degree of gravity much more nearly reflects the relative value of light crude on today's markets for petroleum products than does the 8 cent differential previously in effect."

Current Postings

EASTERN STATES

	Nov. 3 1926
New York Transit	3.40
Bradford District	3.40
National Transit	3.30
Southwest	3.30
Eureka	3.25
Macksburg	3.05
Gaines	2.85
Somerset medium	2.50
Somerset light	2.65
Cabell	2.40
Ragland	1.25
Corning	2.55
Keister	2.05

CENTRAL STATES

Illinois	2.37
Indiana	2.25
Lima	2.48
Plymouth	1.90
Princeton	2.37
Waterloo	1.35
Wooster	2.55

WESTERN KENTUCKY

Posted by Stoll Refining Company for crude from Allen, Warren, Franklin, Davies, Barren, Cumberland and Monroe Counties

All grades	2.65

MID-CONTINENT

	Prairie Sinclair* Texas Gulf	Magnolia
Below 28	...	1.30
28 to 28.9 gravity	1.65	1.50
29 to 29.9 gravity	1.73	1.55
30 to 30.9 gravity	1.81	1.60
31 to 31.9 gravity	1.89	1.65
32 to 32.9 gravity	1.97	1.70
33 to 33.9 gravity	2.05	1.75
34 to 34.9 gravity	2.13	1.80
35 to 35.9 gravity	2.21	1.85
36 to 36.9 gravity	2.29	1.90
37 to 37.9 gravity	2.37	1.95
38 to 38.9 gravity	2.45	2.00
39 to 39.9 gravity	2.53	2.05
40 to 40.9 gravity	2.61	2.10
41 to 41.9 gravity	2.69	2.15
42 to 42.9 gravity	2.77	2.20
43 to 43.9 gravity	2.85	2.25
44 to 44.9 gravity	2.93	2.30
45 to 45.9 gravity	3.01	2.35
46 to 46.9 gravity	3.09	2.40
47 to 47.9 gravity	3.17	2.45
48 to 48.9 gravity	3.25	2.50
49 to 49.9 gravity	3.33	2.55
50 to 50.9 gravity	3.41	2.60
51 to 51.9 gravity	3.49	2.65
52 and above	3.57	2.70

NORTH AND CENTRAL TEXAS

Ranger, North Texas, Mexia, Powell, Richland, Wortham, Lytton Springs, Currie, Moran, Somerset, Big Lake and Nocona crude

Humble O. & R. Co.* and Texas Co.

	Nov. 3 1926 Humble O. & R. Co.	The Texas Co.
28 to 28.9 gravity	1.50	1.65
29 to 29.9 gravity	1.55	1.73
30 to 30.9 gravity	1.60	1.81
31 to 31.9 gravity	1.65	1.89
32 to 32.9 gravity	1.70	1.97
33 to 33.9 gravity	1.75	2.05
34 to 34.9 gravity	1.80	2.13
35 to 35.9 gravity	1.85	2.21
36 to 36.9 gravity	1.90	2.29
37 to 37.9 gravity	1.95	2.37
38 to 38.9 gravity	2.00	2.45
39 to 39.9 gravity	2.05	2.53
40 to 40.9 gravity	2.10	2.61
41 to 41.9 gravity	2.15	2.69
42 to 42.9 gravity	2.20	2.77
43 to 43.9 gravity	2.25	2.85
44 to 44.9 gravity	2.30	2.93
45 to 45.9 gravity	2.35	3.01
46 to 46.9 gravity	2.40	3.09
47 to 47.9 gravity	2.45	3.17
48 to 48.9 gravity	2.50	3.25
49 to 49.9 gravity	2.55	3.33
50 to 50.9 gravity	2.60	3.41
51 to 51.9 gravity	2.65	3.49
52 and above	2.70	3.57

Corsicana Heavy $1.25 per barrel, posted by Magnolia.

*Until further notice, Ranger, North Texas, Mexia, Powell, Richland, Wortham, Lytton Springs, Currie, Moran and Nocona crudes purchased by the Humble Oil and Refining Company, of a gravity lower than 28 degrees will be paid for with a corresponding decrease of eight (8) cents per barrel for each lower degree of gravity.

SOUTH TEXAS

Mirando	1.25

SOMERSET

Grayburg and Pioneer

28 to 28.9	1.25
29 to 29.9	1.30
30 to 30.9	1.36

(Continued on page 74)

California Crude Oil Prices at the Well

Following are the current prices offered by Standard Oil Company for crude oil at the well: (Price per barrel of 42 gallons in fields indicated)

Gravity (degrees)	Signal Hill	Huntington Beach	Inglewood	Olinda-Brea Canon	Rosecrans Dominguez	Torrance	Richfield	Whittier	La Habra	Montebello	Coyote Hills	Santa Fe Springs	Newhall	Midway-Sunset Elk Hills	McKittrick	Lost Hills	Coalinga	Kern River	Wheeler Ridge
14-14.9	$ .85	$ .85	$ .85	$ .85	$ ..	$ .85	$ .85	$ .85	$ .85	$ .85	$ .85	$ ..	$ .75	$ .75	$ .75	$ .75	$ .75	$ .75	$ .75
15-15.9	.87	.87	.87	.87	..	.87	.87	.85	.85	.85	.85	..	.75	.75	.75	.75	.75	.75	.75
16-16.9	.90	.90	.90	.90	..	.90	.90	.85	.85	.85	.85	..	.75	.75	.75	.75	.75	.75	.75
17-17.9	.94	.94	.94	.94	..	.94	.94	.85	.85	.85	.85	..	.75	.75	.75	.75	.75	.75	.75
18-18.9	.98	.98	.98	.98	..	.98	.98	.86	.86	.86	.86	..	.75	.75	.75	.75	.75	.75	.75
19-19.9	1.04	1.04	1.04	1.04	..	1.04	1.04	.87	.87	.87	.87	..	.75	.75	.75	.75	.75	.75	.75
20-20.9	1.10	1.10	1.10	1.10	..	1.10	1.10	.89	.89	.89	.90	..	..	.82	..	.82	.79	..	.78
21-21.9	1.16	1.16	1.16	1.16	..	1.16	1.16	.91	.91	.91	.98	..	..	.90	..	.90	.86	..	.81
22-22.9	1.22	1.22	1.22	1.22	..	1.22	1.22	.94	.94	.94	1.06	..	..	1.00	..	1.00	.93	..	.85
23-23.9	1.28	1.28	1.28	1.28	..	1.28	1.28	..	..	.97	1.14	..	..	1.11	..	1.11	1.00	..	.89
24-24.9	1.34	1.34	1.34	1.34	1.34	1.34	1.34	..	..	1.01	1.22	1.02	..	1.22	..	1.22	1.07	..	.93
25-25.9	1.40	1.40	1.40	1.40	1.40	1.40	1.40	..	..	1.05	1.30	1.08	..	1.33	..	1.33	1.14	..	.97
26-26.9	1.46	1.46	1.46	1.46	1.46	1.46	1.46	..	..	1.09	1.38	1.16	..	1.44	..	1.44	1.21	..	1.01
27-27.9	1.52	1.52	1.52	1.52	1.52	1.52	1.52	..	..	1.13	1.46	1.24	..	1.55	..	1.55	1.28	..	1.05
28-28.9	1.58	1.58	1.58	1.58	1.58	1.58	1.58	..	..	1.17	1.54	1.32	..	1.66	..	1.66	1.35	..	..
29-29.9	1.64	1.64	..	1.64	1.64	..	1.64	..	..	1.21	1.62	1.40	..	1.77	..	1.77	1.42	..	..
30-30.9	1.70	1.70	..	1.70	1.70	..	1.70	..	..	1.25	1.70	1.48	..	1.88	..	1.88	1.49	..	..
31-31.9	1.76	1.76	..	..	1.76	..	..	..	..	..	..	1.60	..	1.99	..	1.99	1.56	..	..
32-32.9	1.84	1.84	..	..	1.84	..	..	..	..	..	..	1.72	..	2.10	..	2.10	1.63	..	..
33-33.9	..	..	..	..	1.92	..	..	..	..	..	..	1.84	..	2.21	..	2.21	1.70	..	..
34-34.9	..	..	..	..	2.00	..	..	..	..	..	..	1.96	..	..	..	2.32	1.77	..	..
35-35.9	..	..	..	..	2.08	..	..	..	..	..	..	2.08	..	..	..	..	1.84	..	..
36-36.9	..	..	..	..	2.16	..	..	..	..	..	..	2.16	..	..	..	..	..	..	..
37-37.9	..	..	..	..	2.24	..	..	..	..	..	..	2.24	..	..	..	..	..	..	..
38-38.9	..	..	..	..	2.34	..	..	..	..	..	..	2.31	..	..	..	..	..	..	..
39-39.9	..	..	..	..	2.44	..	..	..	..	..	..	2.44	..	..	..	..	..	..	..
40-40.9	..	..	..	..	2.54	..	..	..	..	..	..	..	..	..	..	..	..	..	..
41-41.9	..	..	..	..	2.64	..	..	..	..	..	..	..	..	..	..	..	..	..	..
42-42.9	..	..	..	..	2.74	..	..	..	..	..	..	..	..	..	..	..	..	..	..

¶ THE SINCLAIR LAW OF LUBRICATION ¶ For every machine ¶ of every degree of wear ¶ there is a scientific Sinclair Oil ¶ to suit its speed and seal its power

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REG. U.S. PAT. OFF.

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[1916-26—*Ten years of manufacturing and distributing petroleum products of quality*]

SINCLAIR OPALINE MOTOR OIL
REG. U.S. PAT. OFF.

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SOMERSET

(Continued from page 72)

	Nov. 3 1926
31 to 31.9	1.54
32 to 32.9	1.62
33 to 33.9	1.70
34 to 34.9	1.78
35 to 35.9	1.86
36 to 36.9	1.94
37 to 37.9	2.02
38 and up	2.10

GULF COAST

All fields except Spindletop

Grade "A" all companies	1.40
Grade "B"	1.40
Gulf Coast Light Oil, Below 25	1.40
25 to 25.9	1.45
26 to 26.9	1.50
27 to 27.9	1.55
28 to 28.9	1.60
29 to 29.9	1.65
30 to 30.9	1.70
31 to 31.9	1.75
32 to 32.9	1.80
33 to 33.9	1.85
34 to 34.9	1.90
35 to 35.9	1.95
36 to 36.9	2.00
37 to 37.9	2.05
38 to 38.9	2.10
39 to 39.9	2.15
40 and above	2.20

***Humble Oil and Refining Company's postings on Gulf Coast Light stop at 35 to 35.9. Its price on all crude above 35 is $1.95 per barrel.**

(Continued on page 58)

SPINDLETOP LIGHT

Posted by Gulf Pipe Line Company, Humble Oil and Refining Company, Magnolia and Texas Company. Other companies buying Spindletop crude on regular Gulf Coast basis as shown above.

Below 25 gravity	*1.25
25 to 25.9	1.30
26 to 26.9	1.35
27 to 27.9	1.40
28 to 28.9	1.45
29 to 29.9	1.50
30 to 30.9	1.55
31 to 31.9	1.60

***The Texas Company does not post prices on this grade.**

SPINDLETOP HEAVY

The following prices are posted only by the Gulf, Magnolia and Sun Companies:

Grade "A"	1.25
Grade "B"	1.15

LULING

Based on Contract	1.30

TEXAS PANHANDLE

Magnolia Petroleum Company

Hutchinson, Carson and Gray counties, all grades	1.25

Humble Oil & Refining Company

Hutchinson, Carson and Wheeler counties, all grades	1.25

Gray County

28 to 28.9 gravity	$1.10
29 to 29.9	1.15
30 to 30.9	1.20
31 to 31.9	1.25
32 to 32.9	1.30
33 to 33.9	1.35
34 to 34.9	1.40
35 to 35.9	1.45
36 to 36.9	1.50
37 to 37.9	1.55
38 to 38.9	1.60
39 to 39.9	1.65
40 to 40.9	1.70
41 to 41.9	1.75
42 to 42.9	1.80
43 to 43.9	1.85
44 and above	1.90

Crane-Upton-Crockett Counties

Below 26 gravity	.80
26 to 26.9	.85
27 to 27.9	.90
28 to 28.9	.95
29 to 29.9	1.00
30 to 30.9	1.05
31 to 31.9	1.10
32 to 32.9	1.15
33 to 33.9	1.20
34 to 34.9	1.25
35 to 35.9	1.30
36 and above	1.35

Crane-Upton Counties

Kay County Gas Company

	Nov. 3
Below 26 gravity	.80
26 to 26.9	.85
27 to 27.9	.90
28 to 28.9	.95
29 to 29.9	1.00
30 to 30.9	1.05
31 to 31.9	1.10
32 to 32.9	1.15
33 to 33.9	1.20
34 to 34.9	1.25
35 to 35.9	1.30
36 and above	1.35

Kay County Gas Company and Gulf Pipe Line Company

Hutchinson and Carson Counties, All grades	$1.25

WYOMING-MONTANA

Wyoming

Byron	2.25
Ferris	1.53
Elk Basin	2.40
Grass Creek	2.40
Rock Creek	2.40
Lost Soldier	1.10
Lance Creek	2.40
Mule Creek	1.75
Notches	.65
Big Muddy	2.25
Osage	2.15
Hamilton Dome	.73
Pilot Butte	1.75
Torchlight-Greybull	2.15
Lander	1.10

Salt Creek

(Midwest Refining Company)

	1926
29 to 29.9 gravity	1.73
30 to 30.9 gravity	1.81
31 to 31.9 gravity	1.89
32 to 32.9 gravity	1.97
33 to 33.9 gravity	2.05
34 to 34.9 gravity	2.13
35 to 35.9 gravity	2.21
36 to 36.9 gravity	2.29
37 to 37.9 gravity	2.37

Montana

Sunburst	1.35
Cat Creek	2.15

NEW MEXICO

Artesia	1.95
Hogback	1.95

CANADIAN CRUDE

Oil Springs	2.95
Petrolia	2.80

***Bounty on Canadian crude is ¾ cent per gallon, or 26¼ cents per barrel**

LOUISIANA-ARKANSAS

Caddo Light

38 gravity and above	2.45
35 to 37.9 gravity	2.35
32 to 34.9 gravity	2.25
*Below 32 gravity	2.10

Caddo Heavy

Below 26.0	1.40
26 to 28.9	1.55
29 to 31.9	1.70

Homer

Below 31 gravity	1.85
35 gravity and above	2.20
33 to 34.9 gravity	2.10
31 to 31.9 gravity	2.00

Cotton Valley

All Grades	1.20

Haynesville

33 gravity and above	2.10
Below 33 gravity	2.00

Pine Island

(Posted by Magnolia)

Below 26	1.40
26 to 28.9	1.55
29 to 31	1.70
32 to 34.9	2.25
35 to 37.9	2.35
38 and above	2.45

Bull Bayou

	Nov. 3
38 gravity and above	2.25
35 to 37.9 gravity	2.10
32 to 34.9 gravity	1.95
De Soto crude	2.30
Crichton	2.10
Bellevue	1.40
Jennings	1.50
Vinton	1.50
Edgerly crude	1.50
Urania	1.10

Smackover

(Standard, Gulf, Louisiana, Shreveport-El Dorado and Atlanta)

27 and above	1.50
26 to 26.9 gravity	1.45
25 to 25.9 gravity	1.40
24 to 24.9 gravity	1.35
Below 24 gravity	1.10

The Texas Company

27 and above	1.50
26 to 26.9 gravity	1.45
25 to 25.9 gravity	1.40
24 to 24.9 gravity	1.30
Below 24 gravity	1.10

El Dorado and Lisbon

(Atlantic)

37 and above at 60 degrees	2.30
35 to 36.9 gravity	2.20
33 to 34.9 gravity	2.10
Below 33 gravity	2.00
East Field (Calion)	.95

Stephens District

26 gravity and above	1.65
Below 26 gravity	1.45

***The Texas Company's posting on below 32 gravity is $1.85.**

Lockport Production Off Despite New Well

Houston, Texas. — Completion of Vacuum Oil Company's Freiberg & Wolf No. 3 at Lockport October 28, for 750 barrels, 24 gravity crude, from 3133 feet, added the fourteenth producer to the field. Sanding up of the Miller No. 3, which has been flowing roughly 500 barrels, and a drop from 1400 to 500 barrels in the Miller No. 4 due to sanding, brought the daily average of the field from 4150 to 3550 barrels for the week ending October 30, regardless of the new producer.

The Vacuum brought in its Farquhar A-1 November 1, flowing 75,000,000 feet of dry gas from 3746 feet after the hole had been worked over and screen set in an effort to make an oil producer from 71 feet of broken sandy shale and oil sand. The well blew out September 25, with 125,000,000 feet of gas and wrecked the derrick while screen was being run. It blew wild until being killed by lubrication .

The Lock-Moore No. 4, being drilled at Lockport by the Vacuum, was down 6304 feet in shale November 1, and was drilling deeper. At this depth the well was 277 feet deeper than any hole ever drilled in the United States outside of California and the deep gas wells in the Eastern States.

E. P. Abbott, formerly chief refinery engineer of the Humble Oil & Refining Company, is now in charge of construction and designing for the Pan-American Company which has an extensive construction program projected on the East coast.

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COMPLETIONS FOR PAST WEEK IN U.S. FIELDS

Summarized Review of Field Results

State—	Completions This Week	Completions Last Week	Producers This Week	Producers Last Week	Gas Wells This Week	Gas Wells Last Week	Failures This Week	Failures Last Week	Initial Production This Week	Initial Production Last Week
Arkansas	20	18	14	12	2	3	4	3	774	960
California	20	20	17	18	2	..	1	2	13,877	15,199
Colorado	1	..	..	..	..	..	1	..	....	.....
Indiana	4	2	2	1	1	1	1	..	230	1
Illinois	7	9	3	4	..	..	4	5	124	240
Kansas	23	37	13	22	..	2	10	13	1,414	2,874
Kentucky	30	26	24	20	2	1	4	5	283	336
Louisiana	23	16	10	13	3	2	10	1	3,180	5,870
Michigan	7	5	6	5	..	..	1	..	160	98
Mississippi	..	..	..	..	..	..	..	..	....	....
Montana	11	8	6	8	..	..	5	..	1,355	650
New York	..	22	..	22	..	..	..	..	....	50
New Mexico	..	2	..	1	..	..	..	1	....	150
Ohio	43	21	25	15	11	3	7	3	384	403
Oklahoma	94	110	54	67	9	7	31	36	51,271	23,385
Pennsylvania	55	71	46	58	6	9	3	4	110	156
Tennessee	..	..	..	..	..	..	..	..	....	....
Texas	246	209	159	140	9	4	78	65	55,580	70,644
West Virginia	41	36	13	16	25	14	3	6	126	129
Wyoming	6	7	5	6	..	..	1	1	870	670
Total	631	619	397	428	70	46	164	145	135,738	121,815

Texas

ARCHER COUNTY

Company, Well and Location	Initial Production Bbls.	Depth
Continental Oil Co.'s Hamilton 18	*	1818
Continental & Camp O. & G. Co.'s Phillips 2	*	1250
Elliott et al's Tarr 1	*	1509
Gulf Prod. Co.'s K. & K. 3-C	35	1799
Hunter et al's Rossmessen 1	*	1769
A. W. Johnston et al's Garvey 1	*	839
Kentucky Oil Corp.'s Simms Oil Co.'s Turbeville 1	*	1555
Magnolia Pet. Co.'s L. L. Hudson 5	5	1175
May Rutty 7-B	5	906
Petroleum Producers Co.'s Turbeville 4	1000	1522
Turbeville 5	300	1527
Turbeville 6	500	1525
Ray & Massie et al's Helm 1	*	1575
Rayzor et al's Hull 1	*	1503
Schermerhorn Oil Co.'s Prideaux 2, Blk 26	*	703
Shappell Oil Co.'s Turbeville 3	275	1517
Simms Oil Co. & Consolidated Oil Co.'s Turbeville 3	*	1517
Simms & L. T. Burns' Turbeville 5	*	1015
The Texas Co.'s Turbeville 12-C	350	1525

BIG LAKE

Company, Well and Location	Initial Production Bbls.	Depth
Big Lake Oil Co.'s University 87	880	2895
University 94	1800	2916
University 102	¶10	2410
Texon Oil & Land Co.'s University 54	260	2969
University 55	85	2975
University 57	35	3001

BROWN COUNTY

Company, Well and Location	Initial Production Bbls.	Depth
Amerada Pet. Corp.'s J. H. Fry 3	180	1312
J. S. Cosden et al's Westerman 3-E	60	1250
Gillespie et al's Newton 12	15	1286
Gilman & McMurray's Moore 9	400	1209
Teston 12	200	1215
J. K. Hughes Dev. Co.'s Keller 3	†	1152
Humble O. & R. Co.'s Foster 5	200	1182
Hickman 3	150	1224
Hodnett 8	300	1201
E. P. & W. H. Kilgore 7-D	35	1197
E. P. & W. H. Kilgore 8-D	45	1199
H-W Drilling Co.'s Prather 9	2	1327
Hynes et al's Denman 1	*	1710
Hynes & Price's Low 1	*	1575
Wm. V. Lester's M. E. Fry 6	40	1311
McLester Oil Co.'s W. M. Wooldridge 14	80	1243
Magnolia Pet. Co.'s M. T. Fry 3	45	1322
Mid-West Exploration Co.'s Suttles 16	50	1157
Mitcham et al's Perry 1	15	1240
Moore et al's Brannum 1	*	1618
Morris et al's Warnock 1	*	1020
Russell et al's Oden 1	*	1340
Schoonmaker et al's Cleveland 1	*	1680
Vacuum Oil Co.'s Cason 1	*	1538
West & H-Y Oil Co.'s Newton 19	*	1227
Williamson et al's Wooldridge 3	†	1062

BURKBURNETT

Company, Well and Location	Initial Production Bbls.	Depth
Bridwell-Heydrick Oil Co.'s Ward-Todd 9	60	1878
Magnolia Pet. Co.'s H. Beach 42	30	1174
G. R. Ridgeway et al's Foster-Allen 1	*	2104
Saunders Estate's Fee 1	*	1925

CALLAHAN COUNTY

Company, Well and Location	Initial Production Bbls.	Depth
Cranfill-Reynolds Oil Co.'s Henderson 7	5	1405
Florence Oil Co.'s Cunningham 1	15	1415
Lamar 3	20	1414
Prairie Oil & Gas Co.'s Baum 3	25	1402
Cunningham 8	25	1405

CARSON COUNTY

Company, Well and Location	Initial Production Bbls.	Depth
American Ref. Co.'s Burnett 8	195	3060
Empire Gas & Fuel Co.'s Burnett 1	90	3167
Marland Oil Co.'s Burnett 2-C	¶15	3117

COLEMAN COUNTY

Company, Well and Location	Initial Production Bbls.	Depth
Logan et al's Russell 1	†	785

CLAY COUNTY

Company, Well and Location	Initial Production Bbls.	Depth
Ferguson et al's Dowein & Son 1	*	2390

COOKE COUNTY

Company, Well and Location	Initial Production Bbls.	Depth
John Hooser's J. A. Dennis 10	70	1293
C. C. Lanier et al's A. Hyman 8	20	1267
A. Hyman 9	25	1188
Sun Oil Co.'s A. Hyman 6	20	1266

COMANCHE COUNTY

Company, Well and Location	Initial Production Bbls.	Depth
T. & P. Coal & Oil Co.'s Kirk 1	30	2940

EASTLAND COUNTY

Company, Well and Location	Initial Production Bbls.	Depth
Applegate et al's Cunningham 1	*	2125
Amyx et al's Connelle 3	¶2½	2958
Evans et al's Higgins 1	*	1485
Gates Oil Co.'s Hankins 5	*	2636
Golderich & Mims' Cade 1	†	300
Gholson et al's Duffey 1	†	1115
Hickok Prod. & Dev. Co.'s Owens 1	*	3565
Lightfoot et al's Earnest 1	*	1632
McLester Oil Co.'s Brown 1	†	1000
Col. R. D. Gordon et al's Ramswoer 1, dd	600	3723
Texas Dev. Co.'s Lewis 2	*	1650

ELECTRA

Company, Well and Location	Initial Production Bbls.	Depth
Culbertson & Co.'s W. T. Waggoner 43	*	1772
Dale Oil Corp.'s Burnett 16	*	1980
Jennings 26	*	1613
Eureka Prod. Co.'s W. T. Waggoner 13	75	1499
Magnolia Pet. Co.'s H&TC 74	*	2200
The Texas Co.'s W. T. Waggoner 312	30	1980
W. T. Waggoner 316	10	541

GRAY COUNTY

Company, Well and Location	Initial Production Bbls.	Depth
Magnolia Pet. Co.'s W. W. Merten 10, shot	30	3130
W. W. Merten 11, shot twice	30	3185
Marland Oil Co.'s J. T. Benton 1, shot	90	3160
McMan Oil & Gas Co.'s H. H. Merten 1, shot	185	3240
Worley-Reynolds 5, shot	80	3084
Worley-Reynolds 8, shot	75	2950
Phillips Pet. Co.'s Merten Bros. 2, shot	380	3162
Wilcox O. & G. Co.'s Worley-Reynolds 5	600	2929

HUTCHINSON COUNTY

Company, Well and Location	Initial Production Bbls.	Depth
Center Dome Oil Co.'s J. E. Pritchard 2, shot	50	2838
Douglas Oil Co.'s J. A. Whittenburg 1	15	3061
Gopher Oil Co.'s Tom Lewis 1	25	3017
Goldelline Oil Co.'s J. A. Whittenburg 1-H	20	3047
Gulf Prod. Co.'s E. B. Johnson 9	225	2900
E. B. Johnson 10, shot	600	2925
J. K. Hughes Dev. Co.'s W. L. Kingsland 7-B, shot	50	2820
S. D. McElroy's Smith 1, shot	500	3033
Marland Oil Co.'s Johnson 8-A, shot	500	2960
Mid-West Exploration Co. et al's Smith 5	50	2780
Newby Oil Co.'s E. Cockrell 2, shot	75	3035
Panhandle Oil Co. et al's Smith 1, shot	200	2900
Phillips Pet. Co.'s Johnson-Gordon 5	1400	2948
J. J. Perkins-Martin 2, shot	150	2912
Johnson-Hagey 1	¶45	2735
Johnson-Neil 1, shot	35	2723

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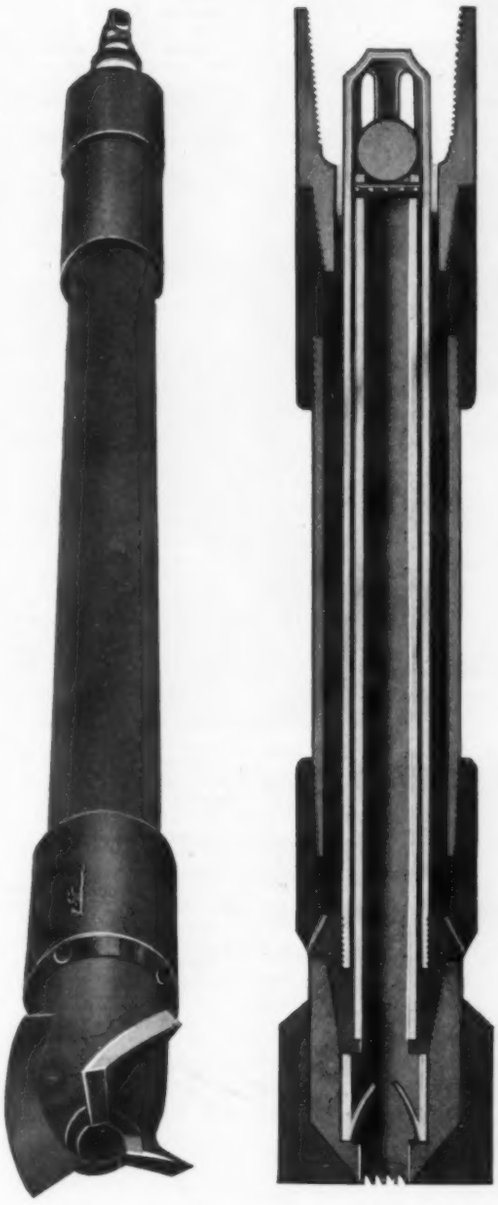

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Company, Well and Location	Initial Production Bbls.	Depth
Johnson-Whitehead 1	25	2745
J. A. Whittenburg 4, shot	250	3009
Johnson-Elra 1	†	500
W. L. Kingsland-Lansing 1, shot	125	2765
Phillips Pet. Co. & Gibson Oil Corp.'s W. L. Kingsland 2	100	2999
Phillips-Gibson & McMillan's J. A. Whittenburg 4	100	2883
J. R. Phillips et al's Smith 3	50	2834
Smith 4	300	2720
Plains Drilling Co.'s W. S. Christian 1-B, shot	30	2912
Prairie O. & G. Co.'s & Phillips Pet. Co.'s Johnson 22-A	1200	2988
Johnson 3-A	385	2807
Prairie O. & G. Co.'s M. Weatherly 7	25	3047
Relief Oil Co.'s Smith 3, shot	80	2765
Roxana Pet. Corp.'s Smith 4	†	2753
White Eagle O. & R. Co.'s Johnson-Grace 2	50	2940

JACK COUNTY

Buttram Pet. Corp.'s Cullers 2	80	2066
Cooper-Goldsmith et al's Gillespie 1	†	260

K-M-A IOWA PARK

Craig-Wilson & Sadler's Mangold 1	*	1850
Magnolia Pet. Co.'s S. S. Fassett 2	*	2019
Panhandle Ref. Co.'s Riley-Griffin 1	200	1795
Simms Oil Co.'s Chilson 6	50	1179

MITCHELL COUNTY

Atlantic Oil Prod. Co.'s Womack 6	85	3065
Womack 7	95	3070

MONTAGUE COUNTY

Allday Oil Co.'s Howard 1	*	2010
Continental Oil Co.'s Maddox 5-A	65	906
Rowland 15	220	1085
Rowland 16	75	1105
Salmon 3	25	925
Farlan Oil Co.'s Maddox 1-B	70	892
Humble O. & R. Co's Maddox 6	90	889
Maddox 11	60	890
Olean Pet. Co.'s Maddox 8	55	870
Pure Oil Co.'s Maddox 5-C	50	910
Maddox 2-D	75	853
Rowland 3-B	120	1107
The Texas Co.'s I. Gist 25-A	10	974
I. Gist 3-B	60	871
Maddox 3-A	85	879
Maddox 1-D	80	999
Oldham 28	40	1110

PALO PINTO COUNTY

Dalton et al's Dalton 1	*	4205
Moore & Snebold's Stuart 5	15	1650
T P Coal & Oil Co.'s Fee 26	¶1½	3400

NIGGER CREEK

Oxford Oil Co. et al's J. B. Riddle 1	†	2680
E. L. Smith Oil Co.'s Rosson 1-A	*	2913
Transcontinental Oil Co.'s Cogdell 8	500	2845
Cogdell 5	700	2814

BARKER COUNTY

Dillon & Johnson's Howard 1	*	1650

SHACKELFORD COUNTY

Milham Corp.'s Simpson 2	*	2703
Peeples et al's Snyder 1	*	1112
Roeser-Pendleton, Inc.'s W. I. Cook 5-B, sec 60	75	1175
Roeser-Pendleton & Marland's W. I. Cook 2-A, sec 60	40	1190
W. I. Cook 29-A, sec 84	100	1341
W. I. Cook, 31-A, sec 84	125	1379
W. I. Cook 33-A, sec 84	*	1393
W. I. Cook 35-A, sec 84	*	1375
W. I. Cook 18-A, sec 85	185	1314
W. I. Cook 1-D, sec 60	¶2½-700	1140
W. I. Cook 1-E, sec 60	950	1151
Tidal Oil Co.'s Flippen 1	*	987

UPTON COUNTY

Dixie Oil Co.'s A. S. Burleson 8	15	2200
Marland Oil Co.'s A. S. Burleson 27	160	2172
B. H. Estep 5	2000	2326

SOUTH VERNON DISTRICT

Humble O. & R. Co.'s W. T. Waggoner 5-NN, dd	185	2441
Magnolia Pet. Co.'s Maggie Waggoner 1	*	2110
Phillips Pet. Co.'s W. T. Waggoner 3-Y	80	1867

STEPHENS COUNTY

Hanlon Gasoline Co.'s Curry 2	*	4405
Hucony Gas Co.'s McPherson 1	*	3535
Mid-Kansas O. & G. Co. et al's S. H. Hill 10	50	3210
Mid-Tex Oil Co.'s Vick 1	*	3450
Mook et al's Riddle 1	¶20	1980
Sun Oil Co.'s Rochelle 4-A	¶¼	2240

YOUNG COUNTY

Allday Oil Co. et al's Campbell 1	*	1015
Barkley-Meadows' (was Roberts & Carter-Ruff) Stewart 9	75	830
Canyon O. & G. Co.'s Stewart 1	*	960
Madden & Hunt's Benson 11	5	920
Benson 12	15	895
Benson 13	250	898
Moran et al's Stewart 1	80	806
Pandem Oil Corp.'s Whitehead 7	*	910
Panhandle Ref. Co.'s Matthews 1	20	796
Matthews 2	55	721
Reed et al's Matthews 1	15	737
Roberts Oil Corp. et al's Rogers 16	*	920
Simms Oil Co.'s Routan 4	10	870
The Texas Co.'s Beardon 19	50	1086
Tidal Oil Co. et al's Benson 3	70	932
Benson 4	10	930
Wichita Prod. Co.'s Beardon 1	30	1078

GULF COAST

Spindletop—		
Gulf Prod. Co.'s Daisy Roche et al 8	350	3000
Atlantic Oil Producing Co.'s McLean 13	500	3375
W. B. Flynn's Gladys 1	*	1800
Graysburg Oil Co.'s McLean 1	*	4175
Rush & Pittman's Hammond 1	*	4575
The Sun Oil Co.'s McLean 1, wo	3600	3325
Walker Synd.'s Quinn 1	*	4550
Yount Lee Oil Co.'s Fee 12	5500	3175
McFadden 13	7975	4080
McFadden 16	2850	3090
Davis 4	500	3490
Batson—		
Acorn Oil Co.'s Paraffine 61	10	1100
Goose Creek—		
Humble Oil & Ref. Co.'s Gaillard-Penn 31	*	2025
Sour Lake—		
Gulf Prod. Co.'s C. L. Jackson 2	240	3700
Lake View Oil Co.'s Hardin County 51	25	1180
Hull—		
Republic Prod. Co.'s Dolbear 108, wo	25	1625
Humble Oil & Ref. Co.'s Lynd 1, wo	*	4260
Hull Oil Co.'s Abel 11	35	2200
Empire Gas & Fuel Co.'s Barngrover 21	100	3090
South Dayton—		
Gulf Prod. Co.'s P. W. Beckman 1	1200	3700
Humble Oil & Ref. Co.'s Welder 3	400	3750
Welder 4	1400	3550
Pierce Junction—		
H. R. Cullen's Howe 7, wo	*	4060
Orange—		
Texhoma Oil & Co.'s Chesson 9, wo	*	4880
O ange Pet. Co.'s No. 7, wo	*	3050

SOUTHWEST TEXAS

Luling—		
Magnolia Pet. Co.'s Morris 19	100	2141
Jim Hogg County—		
Magnolia Pet. Co.'s Palacios 13	125	1280
Kleberg County—		
Humble Oil & Ref. Co.'s Dennet 1-B	100	....
Webb County—		
The Sun Oil Co.'s Bruni 7	¶	....

NORTH-CENTRAL TEXAS

Nigger Creek—		
Pure Oil Co.'s Oliver 1	*	1700
Trans-Continental Oil Co.'s Medlock 4	200	2800
Medlock 5	200	2800
Richland—		
The Sun Co.'s E. Swink 1, wo	*	3000

SOUTH LOUISIANA

Vinton—		
Gulf Ref. Co. of Louisiana's F. H. Gray 2-A	50	3400
F. H. Gray 3, wo	1500	1900
The Texas Co.'s Gray 2-C	*	4450
Vincent 16, wo	40	2280

Louisiana

Company, Well and Location	Initial Production Bbls.	Depth
Caddo Parish—		
Bayou State Oil Co.'s Peak 23, 23-22-15	30	1040
Magnolia Pet. Co.'s Dillion 17, 24-21-15	¶10-1200	3644
Owl Oil Co.'s Hammock 1, 34-18-16	¶12	971
Wilburn 1, 4-17-16	¶12	2604
Ramsey et al's Powell 1, 36-22-16	15	1040
Powell 2, 36-22-16	*	1042
Total, 6 wells	¶32-1245	
Monroe Gas Field—		
Palmer Corp.'s Cole 4, 7-19-4e	¶5½	2165
Urania Field, Grant Parish—		
The Texas Co.'s Swope 1, 16-9n-1e	25	1589
Urania Field, La Salle Parish—		
McGaha et al's Urania Lumber Co. 1, 5-10-2e	*	1544
Montague Oil Co.'s Zenoria Lumber Co. 5, 11-9n-1e	200	1504
Shreveport Oil Corp.'s Pendarvis 3, 26-10-1e	75	1527
Geo. W. Wetherbee's Urania Lumber Co. A-5, 2-9-1e	25	1502
Total, 5 wells	325	

EAST TEXAS

Marion County—		
Ackerman Drilling Co.'s Jeems Bayou 1, Brandon Sur.	*	2565
Morefield et al's Mebane Stiles 1, Gupton Sur.	*	1042
Panola County—		
Magnolia Pet. Co.'s Ford 1, Booker Survey	*	2788

California

Huntington Beach Townsite—		
California Pet. Corp.'s McIntyre 1	819	3994
Plavan 2	1220	4002
Lewis 1	250	4000
Turner 1	1200	3942
Geo. F. Getty's No. 6	1450	3049
E. J. Miley's Pacific Electric 3	1450	3990
Petroleum Securities Co.'s Gross 1	1500	3975
Gross 2	1540	3972
Wilshire Oil Co.'s No. 2	2400	4030
Long Beach-Cerritos—		
Barham-Leeper Organization's well	90	4816
Cal-American Oil Co.'s Richmond 1	27	4415
A. J. Delaney's Los Cerritos 36	*	2162
General Pet. Corp.'s K. & H. 7, wo	246	5100
Shell Co.'s Fee 1	20	4914
Athens-Rosecrans—		
Big 5 Oil Co.'s Cole 2	800	4016
Union Oil Co.'s Howard Park 30	565	4024
Baldwin Hills-Inglewood—		
California Pet. Corp.'s Smith 6, wo	60	3890
Montebello—		
Union Oil Co.'s La Merced 28	¶2	4254
Brea-Richfield—		
Nugent Oil Co.'s Damon	240	3187

Mountain States

WYOMING

Salt Creek—		
Midwest Oil Co. No. 22-A, NW¼ 25-40-79	100	1545
No. 18, NE¼ 23-40-79	60	1205
Salt Creek Consolidated Oil Co. No. 3A, NE¼ 3-40-79	100	1830
Wyoming Associated Oil Co., No. 16L, NE¼ 26-40-79	400	2356
H. V. Meabon No. 1, 16-40-79	*	2000
Lost Soldier—		
Prairie Oil & Gas Co., No. 38-A, 11-26-90	210	1900

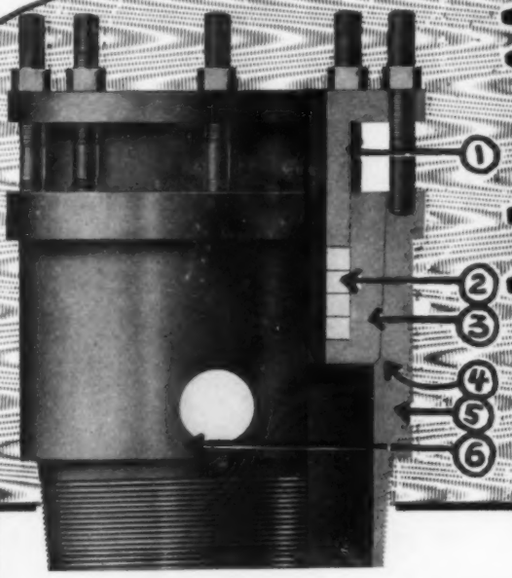
COLORADO

Wellington—		
Kitterman Dev. Co., No. 1, 8-9-68	*	4500

MONTANA

Kevin-Sunburst—		
Ferdig Oil Co., No. 20-L, NE¼ 34-35-2w	*	1525
Julian Petroleum Co. No. 18, SW¼ 30-35-1	50	1450
No. 17, SW¼ 30-35-1	1000	1450
Wolf Dev. Co., No. 3, SE¼ 27-35-2	*	1525
Ohio Oil Co., No. 2J, 18-34-1	10	1450
O'Neil Bros., No. 2, SE¼ 28-35-2	75	1475

These 6 features mean 6 times better



1. Renewable Forged Gland.
2. Large Packing Space, with uniform size Packing.
3. Renewable Inner Ring.
4. Ground Joint Seat between Ring and Body.
5. Solid Forged Body of High Carbon Steel.
6. Any size and number of Gas Outlets desired.

THIS IMPROVED BRADENHEAD is forged from high carbon steel. It has three times the packing space of the ordinary Casing Head, is tested at 3000 pounds hydraulic pressure and will control the heaviest "gasser." —By replacing the split gland and inner rig, one size Bradenhead may be used to pack off several sizes of casing. Due to the ground joint beveled seat between the inner ring and body, uniform size packing can be used in all size heads. This eliminates the necessity of stocking several sizes of packing.

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GULF COAST MACHINE & SUPPLY CO.

HOUSTON, TEXAS
316 West Bldg.

BEAUMONT, TEXAS
305 Orange St.

GULF CO PRODUCTS

Company, Well and Location	Initial Production Bbls.	Depth
Bottiney-Minot Oil Co., No. 2, SW¼ 33-35-1	70	1300
California Pet. Corp. No. 6M, SW¼ 27-35-2	*	1425
No. 8L, SE¼ 27-35-2	150	1430
No. 7S, NE¼ 27-35-2	*	1525
No. 4, SE¼ 34-35-2	*	1535

Kansas

Company, Well and Location	Initial Production Bbls.	Depth
Cowley County—		
Marland Oil Co., School land 1, NWc SW SE 15-32-4e	99	3371
Trees Oil Co., Robison 1, SEc SW 15-32-4e	100	2527
Greenwood County—		
Sinclair O. & G. Co., Browning 47, C W½ SW 20-22-10	85	2349
Browning 48, C NE SW 20-22-10e	120	2325
Davis, Hazlett et al, DeMalorie 9, SEc SW SW 7-22-11e	150	2131
Simons et al's Frankhauser 11, NWc NE SE 4-22-12e	150	1843
Simmons et al, Swanson 8, SEc NE NE SE 4-22-12e	150	1830
Braden Bros. and Derby Oil Co., Wagler 1, SEc SW SE 22-22-13e	20	1843
Simmons et al, Luthi 1, SEc SW 29-22-13e	250	1716
Derby et al, McGileray 4, SWc NE NE 17-23-11e	250	2020
Theta Oil Co., Schneider 24, C NW NW 10-23-13e	15	1600
Empire Gas & Fuel Co., Schindler 1, NEc NW 27-23-13e	10	1772
Mid-Continent Pet. Corp., Dehlunger 8, NEc SW NE 28-23-13e	15	1758
Sinclair Oil & Gas Co., Browning 41, NWc SE NW 20-22-10	*	2425
White Eagle O. & R. Co., Yearout 1, SEc NW 10-22-11e	*	1950
Davis, Hazlett et al, Teter 3, NWc NE NW 22-23-9e	*	2905
Mid-Continent Pet. Corp., Dehlunger 9, SEc 28-23-13e	*	1862
Flack et al, Mathews 1, SEc SW 16-24-10e	*	2310
Robertson and Dugan, Fee 1, SWc NW NW 20-24-11e	*	2010
Lyon County—		
Gasche and Balliere, Stratton 1, SEc NW 25-20-12	*	1977
Terrien Balliere et al, Clemmer 1, NEc NW 33-21-13e	*	1937
Marion County—		
Leeward Pet. Co., Salle 1, SEc 29-19-4e	*	2650
Sumner County—		
Broadhurst et al, Gilbrath 1, C N L S½ NW 13-35-2w	*	4280

Oklahoma

Company, Well and Location	Initial Production Bbls.	Depth
Carter County—		
Wirt Franklin, Prairie Co., Pruitt 8 SWc NE NW 3-2-3	¶22½	3007
Roxana Pet. Co., Higgins 1-B, NWc SE NW 16-2s-2w	1	1566
Magnolia Pet. Co., Newstadt 4, SW NW SE 34-1s-3w	50	3030
Lane and Mason's Castle 1, SEc NW NW 35-5s-3e	*	100
Creek County—		
Shaffer Oil & Ref. Co., Jones 1, NEc NW SW 26-18-7e	¶10	2995
Transcontinental Oil Co., No. 1, NEc 20-17-8e	100	3568
Lima Oil & Gas Co., Benjamin 2, NWc SW SW 30-15-8e	29	3202
The Texas Co., Johnson 5, C E L NE SW 26-14-8e	10	2466
Ted Ray Oil Co., Brink 1, SEc SW 13-17-10e	110	1852
Pioneer Pet. Co., Bucktrot 12, C N L S½ NW NE 24-17-10e	100	2470
S. J. Smith, Fife 4, NWc SW SW 3-17-11e	¶8	2338
C. G. Tibbins, Posey 1-B, NWc NE NE 30-15-9e	5	2299
J. H. Wright, Tahkaney 11, NEc SW SE 24-17-10e	*	2530
M. P. Evans, Beard & Nichols 1, SEc NW SE 30-17-11e	*	2863
Garfield County—		
Healdton Pet. Co., Belveal 34, C S½ NW NE 24-22-4w	25	1123
Franchott, Lynds 1, SWc 7-22-3w	2	1300
Sinclair Oil & Gas Co., Hartley 48, SW NW NW 18-22-3w	*	2735
Kisner 36, NEc NW NW NW 19-22-3w	*	3444
Hughes County—		
Independent O. & G. Co., Davis 5, SEc SW SE 26-9-9e	408	3238
Transcontinental Oil Co., Harjo 11, SEc SW 26-9-9e	87	3035
Amerada Pet. Corp., Frederick 10, SEc NE NW 5-7-8e	518	4197
Mid-Continent Pet. Corp., Alexander 13, C S½ N¼ NW 3-9-9e	*	4120
Transcontinental Oil Co., Harjo 8, SEc NW SW 26-9-9e	*	3515
Muskogee County—		
E. L. Kistler, Vanderslice 4, NWc SW 29-15-15e	100	1572
Culp et al, Vanderslice 5, SEc NW SE 30-15-15e	15	1620
W. R. Sommerville, Lewis 1, NEc NW NE 17-15-17e	*	1473
Kate & Tetin, Crittenden 1, C SW NE 5-14-19e	*	768
Okfuskee County—		
Gypsy Oil Co., Narjo 2, NWc NE SE 35-11-9e	30	3192
W. L. Holmes 1, NWc SW 36-11-11e	¶7	2565
Amerada Pet. Co., Simmer 1, SWc NW 18-10-11e	70	3656
Okmulgee County—		
Devonian Oil Co., Tiger 8, C SE 24-16-12e	50	2235
W. L. Kistler et al, C EL NE NW 3-11-12e	¶1	927
T. A. Johnson, Marsey 1, NWc NE NE 16-15-12e	*	2722
Osage County—		
Kenner O. & G. Co.'s No. 1, NWc SW SW 18-29-12e	110	1065
Osage Gas Prod. Co., No. 1, NW SE SE 28-23-10e	¶½	1850
Phillips Pet. Co., No. 5, NW SW SW 1-27-5e	50	2980
Phillips Pet. Co., No. 7, NW SE SW 1-27-5e	450	2989
Skelly Oil Co., No. 7, NWc SW 26-27-5e	10	2970
Phillips Pet. Co., No. 1, SWc SE 7-27-6e	75	3013
No. 14, NEc NW SE 7-27-6e	800	3013
Kewanee O. & G. Co., No. 1, SEc NW 34-27-6e	1810	2822
No. 2, NWc SW NE 34-27-6e	767	2860
The Texas Co., No. 2, NW SW 29-25-8e	130	2512
Lewis Oil Co., No. 5, SE NW NE 30-25-8e	125	2478
Atlantic Oil Prod. Co., No. 1, NE SW NE 19-24-8e	400	2844
Winoma Oil Co., No. 6, NE SW SW 27-27-10e	20	1346
Walker Oil Co., No. 12, NE NW NW 34-24-10e	25	1318
Continental Oil Co. & Prairie, No. 1, NWc 7-23-9e	30	2100
New England Oil & Pipe Line Co., No. 1, SEc SW 17-23-10e	120	2524
Silurian Oil Co., No. 7, SE NE NW 17-23-12e	50	1555
Pure Oil Co., No. 4, SEc NW NE 25-22-7e	60	2810
Tidal Oil Co., No. 20, SEc NW SW 34-22-10e	25	1935
Kewanee Oil & Gas Co., No. 4, SE NW SE 4-22-11e	5	1157
Barnsdall Oil Co., No. 19, C E L W½ E½ SE 30-21-12e	55	1932
Delmar Oil, No. 1, SEc SW 12-28-11e	*	1998
Peters Pet. Co., No. 1, NWc SW 18-23-9e	*	2277
Kewanee Oil & Gas Co., No. 3, SEc SW NW 17-21-12e	*	1637
O. N. G. Co., No. 760, NWc NE 20-21-11e	*	1817
Pawnee County—		
Gypsy Oil Co., Armstrong 1, SEc SW SW 4-20-8e	15	2543
Watchorn O. & G. Co., Miller 16, SWc NE SW 33-23-3e	14-¶5	2025
Payne County—		
Magnolia Pet. Co., Berry 2, NEc SE SE 32-20-5e	57	2569
Twin State Oil Co., Moore 1, SEc 15-19-5e	75	2847
Marland Oil Co., No. 3, NWc SW SE 7-18-5e	20	2846
Twin State Oil Co., Dilley 1, SWc 27-20-5e	*	....
Seminole County—		
Searight et al, Youngblood 3, NWc NE SE 33-10-6e	4841	4318
Mid-Continent Pet. Co., Rentie 1, SEc 14-9-6e	4920	4209
Barnsdall Oil Corp., Carter 2, NEc SE NW 24-9-6e	3225	4133
Tidal Oil Co., Mahardy 1, NEc SW 24-9-6e	5320	4169
Indian Te ritory Illuminating Oil Co., James 7, NWc SW SE 24-9-6e	1474	3976
Independent O. & G. Co. & Garland, Fixico 4, NWc SW NE 26-9-6e	4600	4134
Indian T. I. Oil Co., Bowlegs 3, SWc NW SE 26-9-6e	10,500	4051
Pure Oil Co., Strothers 2, NEc SE SW 26-9-6e	9019	4070
Gypsy Oil Co., Walker 1, NWc SE 15-8-6e	¶3	2458
The Prairie O. & G. Co., Amos 9, NEc SW SE 31-8-8e	150	4150
Magnolia Pet. Co., Scott 4, NWc SW SW 33-8-8e	12	4025
Amerada Pet. Corp., Cudjo 1, NEc NW SW 34-9-6e	*	4350
Tulsa County—		
Superior Oil Co., and Swift Burnett 2, NWc NE NW 7-19-10e	180	2031
Minshall et al, Fife 2, SWc SE SW 15-19-11e	50	2222
Cato Oil Co., Cato 10, C SE NE 29-19-11e	15	2502
Ora Upp et al, Berryhill 1, C W L E½ SE SW 4-19-14e	*	1302
Hilt et al, Oswalt 3-A, NEc NW SW 6-17-13e	*	1970
E. A. Beasley, Berryhill 1-A, C NE NE 29-17-13e	*	1705
Garvin County—		
Mid-Continent Pet. Co., Derdeyn 4, SEc NW SE 17-1n-3w	*	2225
Grady County—		
Badgett and Hugh, Kleeman 1, SWc NE SW 10-5n-7w	*	2909
Grant County—		
Wrightman, Lehring 1, SWc SE NW 19-28-3w	*	4290
LeFlore County—		
LeFlore County G. & E. Co., Graves 70, SWc NW SE 35-7n-26e	*	1865
Peck 71, SWc 18-7n-27e	*	1648
Lincoln County—		
Gypsy Oil Co., Hopewell 1, NWc SE SW 8-15-6	*	4365
Phillips Pet. Co., Hopewell 5, NEc SW SW 8-15-6e	*	....
Sequoyah County—		
LeFlore County G. & E. Co., Barrow 1, NWc NE NW 25-10-25e	*	3134
Stephens County—		
Texhoma Oil & Ref. Co., Church 1, SEc 26-2n-6w	*	2080
Wagoner County—		
Pat Boyles, Overton 2, C W L NW NW 6-17-16e	*	1994
Mitchell Oil Co., Barnett 1, NEc NW NE 36-17-16e	*	1490
Tobasco Oil Co., Kelly 3, C N L SW NW NE 6-17-15e	*	1350

Eastern States

PENNSYLVANIA

Company, Well and Location	Initial Production Bbls.	Depth
Bradford Field—		
South Penn Oil Co., Fee 7	2	....
Whipple 124	2	....
Davis 26	2	....
Rounds 56	2	....
Hodge & Rew 51	2	....
Enterprise 1	2	....
Taylor 37	3	....
Moody 54	2	....
Smith 126	2	....
Bingham 501, tract 17	2	....
Bingham 312, tract 39	3	....

Watch it "Strut its Stuff!"

Back and forth, across the the spool with precision and care it guides the wire line. There's no kinking—no crawling—no possible jam on the drum—no irregular winding—when you use—

The Foster & Smith WIRE LINE CONTROL

THE Foster & Smith Wire Line Control holds a strong back pressure against the casing line when the casing block goes up empty, preventing gaps which cut in the line and eliminates the abuse which wire lines are subjected to in deep drilling. Perfect spooling keeps the casing line from being cut when going into the hole and also speeds up drilling. Nothing to get out of order and quickly attached. Ask your supply house man about it. Used by most all the big companies—and the little ones too. Catalog sent on request.

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Whittier, Calif.

Branch office and Warehouse:

Taft, California Ventura, Calif.

Harry B. Shine, Sales Agent
2408 McKinney Ave., Houston, Texas

R. D. Mumford, Factory Representative
Amarillo, Texas

Company, Well and Location	Initial Production Bbls.	Depth
North Branch Oil Co., North Branch 1	3	....
J. L. Yerden, Bingham 1	3	....
A. Schorman, Allen 1	2	....
Allen 2	3	....
A. & L. Lilly, Marvin 1	2	....
C. B. Kervin, Baldwin 1	2	....
Korner Bros., Pratt 1	3	....
I. A. Hooper & Co., Bingham 428, tract 8	3	....
C. L. Wann & Co., Bingham 388, tract 52	2	....
Howard Jack & Co., Jack 1	3	....
Jeutter Bros., Borden 1	3	....
H. E. Camp & Co., Bingham 1	2	....
C. J. Mitchell, Borden 1	2	....
A. J. Douglas & Co., Borden 1	2	....
Webb Estate, Webb 1	3	....
Bovaird & Park, Bingham 497, tract 38	2	....
J. E. Ward, Bingham 401, tract 16	2	....
Bovaird & Hamlin, Rew 17	2	....
L. H. Givin, Givan 13	3	....
F. M. Johnston & Son, Franchot 26	2	....
L. G. Dana, Dana 21	2	....
Barry & Co., Barry 1	2	....
Miller & Co., Campbell 1	2	....
T. B. Wilson, Borden 5	2	....
Zook & Sloan, Keating 9	3	....
The Pure Oil, Moore 11	2	....
Kaber, Coulter & Co., Coulter 42	2	....
Wilson & Patton, Wommer 1	2	....
Paul Evans & Co., Bingham 1	2	....
M. B. Oil Co., Duke 17	2	....
Duke 18	2	....
Duke 19	2	....
Duke 20	2	....
Greene County—		
Carnegie Natural Gas Co., J. A. Rutan 4	¶1	....
C. S. Day 1	¶2½	....
Manufacturers Light & Heat Co., W. H. Welling 1	¶2	....
J. M. Rose 1	¶2	....
Nettie Cooper 2	¶1½	....
Fox Oil & Gas Co., Lemley Heirs 1	10	....
Jesse L. Garard, Garard No. 3, tract 6	*	....
Rex Clovis & Co., Rex Clovis 1	¶½	....
Raymond Oil Co., Enoch Brooks 8	*	....
Venango County—		
Mong & Clark, Clark 1	2	....
Butler County—		
J. E. Dufford & Co., Kreiss Heirs 1	*	....

WEST VIRGINIA

Company, Well and Location	Initial Production Bbls.	Depth
Roane County—		
United Fuel Gas Co., Mary A. Smith 1	¶2	....
E. Winters 1	¶2	....
William Campbell 1	¶2	....
Buffick Oil & Gas Co., Taylor Heirs 3	¶2	....
Green Creek Oil & Gas Co., M. C. Larch 1	¶2	....
Frank Koontz 1	¶¼	....
Clifton Oil & Gas Co., I. L. Summers 18	3	....
Clay County—		
South Penn Oil Co., O. D. Stockley 37	20	....
O. D. Stockley 38	35	....
R. P. Parker 3	10	....
Doddridge County—		
Manufacturers Light & Heat Co., Edith Yeater 2	5	....
E. Yeater 1	2	....
Trainer & Travis, Verner Noble 1	15	....
Lincoln County—		
United Fuel Gas Co., Horse Creek Land Co. 3	¶¼	....
E. R. Cameron, George P. Alderson 1	¶½	....
Meabon & Huffman, C. Gillenwater 5	5	....
Harrison County—		
Hope Natural Gas Co., C. W. Lynch 1	¶¼	....
Clifton Oil & Gas Co., J. W. Williams 4	¶¼	....
Rapp & Nutter, G. O. Nutter 1	¶2¼	....
Ritchie County—		
American Oil Dev. Co., W. H. Maze 3	*	....
Maxwell & Charter, A. B. White 1	15	....
Calhoun County—		
McIntosh & Scott, C. A. Stahrer 1	¶2	....
Martin Crowley, B. B. McMenaway 1	¶2	....
Logan County—		
Hope Natural Gas Co., Cole Crane 3	¶2	....
Woctock Oil & Gas Co., White Hopkins 1	¶2½	....
Kanawha County—		
United Fuel Gas Co., Lewis Woods 3	¶2	....
Booker Mullen 1	¶2	....
Gilmer County—		
Ohio Fuel Oil Co., Tell McDonald 1	¶2	....
Pittsburg & W. Va. Gas Co., J. S. Stalnaker 1	¶2	....
Wood County—		
Pleasant Hill Oil & Gas Co., E. Marshall 1	3	....
Hoagland Oil & Gas Co., Davis Green 3	*	....
Boone County—		
Halstead & Co., White Hopkins 1	¶2½	....
Owens Bottle Machine Co., Peytona Coal & Land Co. 10	*	....
Pleasants County—		
Dunsmoor & Co., Cal Templeton 1	25	....
Wirt County—		
Roberts Bros., Rathbone Tract 148	2	....
Upshur County—		
Carnegie Natural Gas Co., George Racing 1	1	....
Monongalia County—		
Manufacturers Light & Heat Co., Hennon 1	¶2½	....
Cabell County—		
Chambers Oil & Gas Co., B. F. Chambers 1	¶¼	....
Wetzel County—		
Hope Natural Gas Co., Elmus Miller 2	¶2½	....
Braxton County—		
Pittsburg & W. Va. Gas Co., Louis Bennett 1	¶3	....
Lewis County—		
Carnegie Natural Gas Co., George Wells 1	¶¼	....

KENTUCKY

Company, Well and Location	Initial Production Bbls.	Depth
Wayne County—		
Ross Heirs, Boston Lair 6	2	....
D. A. Adkins, Burnett Heirs 6	*	....
W. L. Souther Interests, Nancy Jones Heirs 3	5	....
Floyd County—		
Eastern Carbon Black Co., W. Leslie 3	¶2½	....
Midas Oil & Gas Co., George Gearhart 12	¶2½	....
Johnson-Magoffin Counties—		
Hupp, Duff & Co., B. F. Whitt No. 1, tract 3	60	....
B. F. Whitt No. 2, tract 3	25	....
R. G. Gillespie Estate, S. Blanton 21	10	....
Y. Hale 5	10	....
Atlantic Oil Prod. Co., G. Blanton 23	8	....
G. Blanton 24	8	....
Hudson & Collins, O. S. Wheeler 13	3	....
Structure Oil Co., W. Prater 1	5	....
Willson Oil Co., L. Owens 4	5	....
Estill County—		
Wood Oil Co., Joseph Neal 2	8	....
Superior Oil Corp., S. Horn 23	2	....
Mt. Spring Oil Co., M. Rogers 4	*	....
Barren County—		
A. W. Ziegler Bros., Darter 5	15	....
Consolidated Gas Co., Duff 49	20	....
Esslinger Oil Co., C. B. Jones 16	15	....
Star Oil & Gas Co., Richardson 17	8	....
Fred C. Moore, Travis 16	8	....
Lawrence-Johnson Counties—		
Keaton Oil & Gas Co., J. Lyons 33	10	....
Swiss Oil Corp., Holbrook 48	7	....
Townsend & Garrison, Dobyne 22	6	....
F. Ferguson 6	8	....
Owensboro Field—		
Surety Oil Co., McDaniels 2	10	....
McDaniels 3	25	....
J. W. Loman Trustee, J. B. Ellis 6	*	....
Ellis & Thomas, Westerfield 1	*	....

SOUTHEASTERN OHIO

Company, Well and Location	Initial Production Bbls.	Depth
Washington County—		
Patterson, Riggs & Co., Adkins 1	2	....
First Nat. Bank of Lowell, Peter Pfaff 18	5	....
Ohio Fuel Gas Co., Hendershot 3	*	....
Sheets Run Oil Co., D. Barnett 1	*	....
Athey & Beeson, Murray-Hupp 1	*	....
Jefferson County—		
A. D. Cubbons, C. Cooper Heirs 2	2	....
W. T. Russell & Co., W. T. Russell 1	*	....
Morgan County—		
The Pure Oil Co., G. J. Fye 13	6	....

CENTRAL OHIO

Company, Well and Location	Initial Production Bbls.	Depth
Licking County—		
Ohio Fuel Supply Co., A. Denbow 1	*	....
G. W. Moran 1	*	....
Wehrle Interests, Parr 1	¶¼	....
Hope Construction & Ref. Co., F. Phillips 4	90	....
Leonard Oil & Gas Co., H. R. Moyer 4	10	....
Guy Shaffer, Jos. Chaney 4	10	....
Hocking County—		
Shull & Bell, Dawley Heirs 1	20	....
Jewell Oil & Gas Co., N. L. Robey 1	10	....
Consolidated Oil Co., C. Bathlow 1	5	....
Graham & Co., M. & J. Hite 9	¶¼	....
Owens & Co., J. Bowlby 1	¶¼	....
Strum & Adair, Woodruff Heirs 1	¶½	....
Perry County—		
Marshall & Co., Donahue 32	3	....
Denman & Son, McGowan 24	2	....
The Pure Oil Co., R. & F. Adcock 1	*	....
Stoltz Oil & Gas Co., Stoltz 1	*	....
Vinton County—		
Boughly & Shaffer, Townsend 1	*	....
Salisbury & Sperry, L. Brooks 1	3	....
Muskingum County—		
Hope Construction & Ref. Co., Frank Varner 1	90	....
Meigs County—		
Coal Hollow Oil & Gas Co., Burdette 1	¶¼	....
Athens County—		
Athens State Oil & Gas Co., Ohio State Land 4	¶2	....
Coshocton County—		
The Ohio Oil Co., R. L. McKelvey 1	¶5	3225
Medina County—		
Empire Gas & Fuel Co., T. Sylvester 1	*	3627

NORTHWESTERN OHIO

Company, Well and Location	Initial Production Bbls.	Depth
Wood County—		
Oko Oil & Gas Co., W. Budd 6	14	1292
C. Thiass 5	5	1295
G. DeVerna 9	6	1291
The Ohio Oil Co., McCleary 2	2	1517
O. F. Zeising & Co., O. Brimm 1	4	1308
Hancock County—		
Kirk, Discuss & Co., Discuss 2	25	1370
Robert Kirk, Bill Flick 1	15	1362
M. E. Brower, Brower 2	5	1350
Allen County—		
Youngpeter Oil & Gas Co., John Lenney 2	35	1367
Sandusky County—		
Hurry Up Oil Co., Hummell 8	10	1328
Van Wert County—		
M. P. Colt & Co., E. E. Jones 3	5	1245
Auglaize County—		
I. C. Robison & Co., F. N. Roth 1	*	1231

MICHIGAN

Company, Well and Location	Initial Production Bbls.	Depth
Saginaw County—		
The Sun Co., J. Schoenteit 3	10	1844
J. Schoenteit 4	15	1848
C. J. Rab 1	10	1846
Saval Dev. Co., Geo. Spatz 2	90	1832
Great Lakes Oil Co., T. Tomforde 1	20	1828
Fordney Pet. Co., Mrs. M. Schultz 1	15	1832
Vorhees & McNally, Mrs. Marshall 1	*	2056

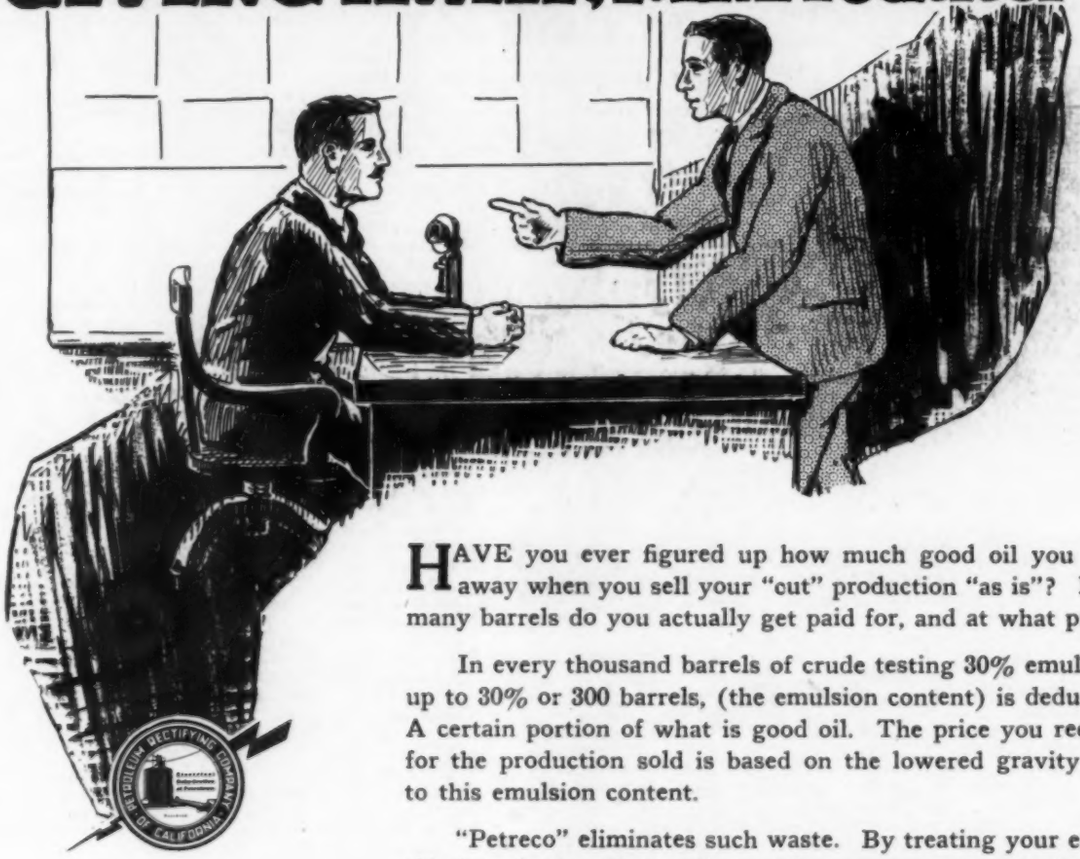
INDIANA

Company, Well and Location	Initial Production Bbls.	Depth
Pike County—		
Bement Oil Co., W. H. Shawhan 2	30	957
Gem Oil Corp., A. Yeager 1	¶½	314
Daviess County—		
Geiger Oil Co., E. N. White 1	200	1108
Sullivan County—		
The Ohio Oil Co., Merrill 22	*	2475

ILLINOIS

Company, Well and Location	Initial Production Bbls.	Depth
Wabash County—		
Mayhugh & Co., Kogan Heirs 10	105	1418
W. C. McBride Inc., J. H. Cisil 6	15	1156
Mahutska Oil Co., Armstrong 3	*	1580
Blosser & Phipps, S. Compton 1	*	1520
Smith & Co., V. Tanguary 1	*	1720
Clark County—		
C. L. Palmer & Co., George Smith 14	4	580
W. C. McBride, Inc., A. Beasley 1	*	1605

HOW MUCH OIL *are you* GIVING AWAY, Mr. Producer?



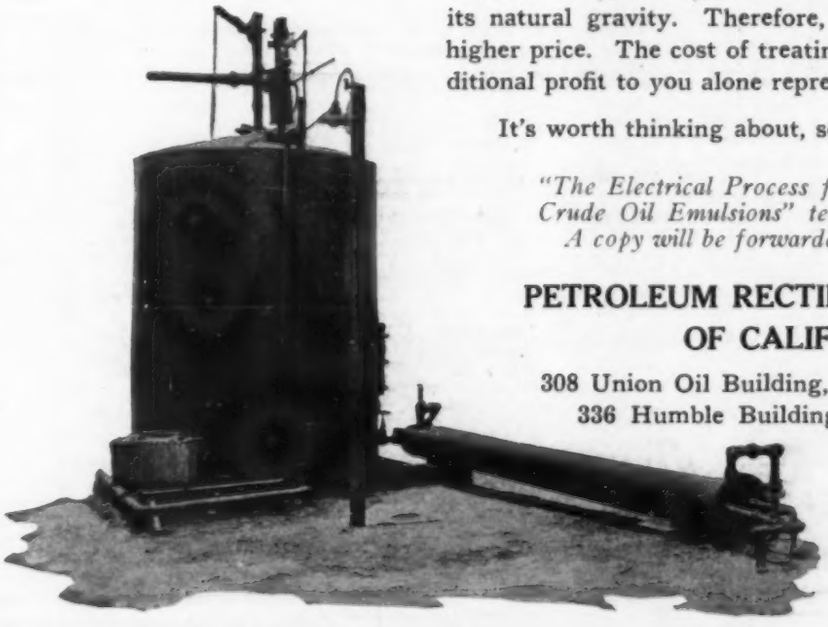
HAVE you ever figured up how much good oil you give away when you sell your "cut" production "as is"? How many barrels do you actually get paid for, and at what price?

In every thousand barrels of crude testing 30% emulsion, up to 30% or 300 barrels, (the emulsion content) is deducted. A certain portion of what is good oil. The price you receive for the production sold is based on the lowered gravity due to this emulsion content.

"Petreco" eliminates such waste. By treating your emulsified crude the "Petreco" way, the recovery of good oil from the emulsion content of your gross production ranges from one-half of 1% to 50%, and the entire production is raised to its natural gravity. Therefore, you sell more oil, and at a higher price. The cost of treating is so small that the net additional profit to you alone represents substantial dividends.

It's worth thinking about, seriously.

"The Electrical Process for the Dehydration of Crude Oil Emulsions" tells the complete story. A copy will be forwarded to you on request.



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336 Humble Building, Houston, Texas

Say you saw it in The OIL WEEKLY

WILDCATS FROM ALL SECTIONS

East Central Texas Wildcats

COMPLETIONS

Company, Well and Location	Initial Production Bbls.	Depth
McLennan County—		
Pecan Gap Oil Co.'s E. W. Punchard 1	*	2134
Navarro County—		
R. R. Penn & Rycade Oil Corp.'s Harrison 1	*	3051

West Texas Wildcats

Crane County—		
Gulf Prod. Co.'s Crier-McElroy 3	225	2850
Crockett County—		
Wilcox O. & G. Co.'s University 1	*	4935
Howard County—		
Lockhart & Co. & Carey's Chalk 1-A	70	1582
Magnolia Pet. Co.'s Mary Chalk 1	65	1660
Pecos County—		
Transcontinental Oil Co.'s Perry 1	*	3540
Reagan County—		
Roxana Pet. Corp.'s Boyd 1	*	3174
Sterling County—		
H. D. Rummel et al's L. T. Clark 3	3	1175
Upton County—		
Wentz Oil Corp.'s Shirk 1	250	2331

DRILLING REPORT

ANDREWS COUNTY—Amon G. Carter & Zweifel's Cowden 1, rig. Maer-Staniforth's W. S. Taylor 1, lcn. Henry Zweifel et al's Means 1, lcn.

BREWSTER COUNTY—Green Valley Oil Corp.'s J. P. Wilson 3-A, dr 635 ft. Roseborough et al's Skinner 1, ur 1290 ft.

COKE COUNTY—Lipan Oil Co.'s Rawlings 1, fsh tools 2705 ft.

CONCHO COUNTY — Culbertson Bros. & Co.'s W. G. See 1, dr 1720 ft. Eugene Mays et al's Wilson-Hartgrove 1, sd 1005 ft. The Exploration Co.'s Hartgrove 1, sd 1115 ft.

CRANE COUNTY — Duffey Bros. & Co.'s Cowden 1, elevation 2461 ft, top salt 752 ft, dr 2760 ft; Griffith 1, dk. Gulf Prod. Co.'s Crier-McElroy 4, rig; J. T. McElroy 2-A, elevation 2601 ft, tou salt 1000 ft, dr 1650 ft; University-Lassiter 1, elevation 2608 ft, top salt 1163 ft, sd 2375 ft. Independent Oil & Gas Co.'s Hughes 1, testing oil pay 2310-247 ft. Magnolia Pet. Co.'s University-Hardwick 1, dr 1950 ft; University- O'Keefe 2, dr 2675 ft; University-O'Keefe 3, lcn; University-Lassiter 1, lcn. Magnolia Pet. Co. et al's University-Church 3, spudding. Marland Oil Co.'s Cowden 1-A, elevation 2557 ft, top salt 660 ft, fsh 1850 ft; Cowden 2-A, lcn; Cowden 1-B, rig; Dawson 1, elevation 2510 ft, top salt 670 ft, dr 2790 ft; Durham 2, elevation 2551 ft, top salt 640 ft, dr 2180 ft; Durham 3, top salt 630 ft, set 8¼-inch cas 1612 ft; Hughes 4-C, dr 1100 ft; Hughes 2-D, dr 1760 ft; Hughes-Gibbs 2, top salt 625 ft, dr 1855 ft; Gibbs 1, Plugging back from water 2333 ft. Prairie O. & G. Co.'s University 1, cement 8¼-inch cas 1660 ft; University 2, dr 2215 ft; University 3, lcn; University-O'Keefe 1, rig. Ben D. Simon & Cromwell's Brookfield 1, elevation 2317 ft, top salt 680 ft, fsh 1480 ft. Simms & Atlantic's University 1, dr 655 ft. The Texas Co.'s King 10, dr 1550 ft; King 11, dr 1280 ft; King 12, dr 200 ft. Texas Dev. Co.'s Cowden 1, co to deepen, td 3820 ft. Tidal Oil Co.'s University 2-B, dr 645 ft; University 1-C, dr 1600 ft. Henry Zweifel et al's Cowden 1, dr 160 ft.

CROCKETT COUNTY — Cranfill Bros. Oil Co.'s Harris 1, fsh 480 ft. Cumberland O. & G. Co. et al's Couch 1, sd 2025 ft. Gulf Prod. Co.'s Powell 1-D, ur 8¼-inch cas 2455 ft. J. K. Hughes Dev. Co.'s Powell 2-A, ur 8¼-inch cas 2435 ft; Powell 3-A, ur 8¼-inch cas 2425 ft; Powell 2-B, dr 2485 ft. Humble & Marland's Powell 1-B, dr 2325 ft. Magnolia Pet. Co.'s Shannon 2, rig. Republic Prod. Co.'s Powell 1, swabbing 150 barrels oil 2616-55 ft; Powell 2, dk. Schaffer et al's University 1, sd 2191 ft. Ben Simon & Cromwell's Shannon 1, dr 2985 ft. J. D. Young & Cromwell's Shannon 1, dr 505 ft; University 1, dr 150 ft.

CULBERSON COUNTY—Big Lake Oil Co. et al's C. L. Cass 1, dr 1345 ft. James H. Gardner et al's Radford-State 1, rig. Pure Oil Co.'s TP Fee 1, dr 460 ft.

JEFF DAVIS COUNTY—Humble O. & R. Co.'s McCutcheon 1, ur 3365 ft. J. K. Hughes Dev. Co.'s J. Z. Means 1, fsh 640 ft; Means 2, lcn.

ECTOR COUNTY—J. S. Cosden et al's Connell 1-A, 800 ft, oil in hole and some water, dr, 3546 ft. The Exploration Co.'s TP Fee 1, dr up sand line 3875 ft; Slator 1, spudding. Llano Oil Co. et al's Cowden 1, dr 3625 ft.

FISHER COUNTY—Ideal Oil Co.'s W. F. Martin 1, sr 5 3/16-inch cas 3490 ft. Gibson & Johnson's J. W. Wheeler 1, lcn. Fred Phillips et al's C. M. Webb 1, lcn. Clark et al's Weler 1, dr 130 ft. R. W. Raney et al's Marberry 1, sd 1550 ft.

GLASSCOCK COUNTY—Marland Oil Co. et al's Calder 1, sd 2190 ft. Plateau Oil Co.'s L. S. Bell 1, dr 1285 ft.

TOM GREEN COUNTY—M. D. Bryan et al's Llano Fee 1, crooked hole 2980 ft. Texon & Marland's Sorrell 1, ur 1110 ft. World Oil Co.'s Pulliam 1, dr 3580 ft.

HOWARD COUNTY — Gulf Prod. Co.'s Chalk 1, dr 200 ft. Humble O. & R. Co.'s Douthitt 1, ur 975 ft. Lockhart & Co. & Carey's Roberts 1, dr 895 ft; W. T. Scott 1, dr 2130 ft. Magnolia Pet. Co.'s Mary Chalk 2, dk; Otis Chalk 3, swabbing 30 barrels oil 1618-43 ft; Chalk 4, lcn; Chalk 4-A, std 1347 ft. Marland Oil Co.'s Chalk 4, dr 1145 ft; Chalk 5, dr 710 ft; Chalk 1-A and 2-A, rigs. Reeves & Apperman's H. R. Clay 1, co 950 ft.

JONES COUNTY—Atlantic Oil Prod. Co.'s Howell 1, dr 475 ft. Bateman & Campbell et al's Southard 1, lcn. Cole-Hart et al's Cranston 1, lcn. Hurley Oil Co.'s Arthur Sears 1, set 8¼-inch cas 2035 ft; Mrs. J. V. Wright 1, sd 1300 ft; C. M. Largent 1, lcn. Gillette & Hickey's S. W. King 1, dr 1670 ft; M. E. Young 1, dr 765 ft. Marland Oil Co.'s S. R. Cox 1, dr 2540 ft; Mason-Harris 1-A, spudding; Mason-Harris 2, rig. Mid-West Exploration Co.'s Thornton 1, dr 2235 ft; Thornton 2, lcn. Muse-Robertson et al's Manley 1, machine. Vic H. Martin et al's Culbertson 1, spudding. Phillips Pet. Co.'s Joe Winters 2, electric rig; Walling 1, ur 8¼-inch cas 2170 ft. Taliaferro & Wentz Oil Corp.'s King 1, dr 2190 ft. World Oil Co.'s Boney-Stanford 1, rig. Zeiler et al's Reeves 1, dr 360 ft.

KENT COUNTY—The Texas Co.'s Barron 1, sd 4362 ft.

KIMBLE COUNTY—Dixie Oil Co.'s Harrison 1, sd 1375 ft.

LOVING COUNTY — Duffey Bros. & Arnold's W. D. Johnson 1, lcn. Lockhart & Co.'s R. L. Allen 1, dr 4020 ft.

LYNN COUNTY—Hart Oil Corp.'s Edwards 1, sd 1390 ft.

MENARD COUNTY—J. R. Lewis et al's White 1, sd 180 ft. Clark et al's Kothman 1, spd and sd.

MITCHELL COUNTY—Magnolia Pet. Co.'s Foster 2, fsh 1510 ft. Mid-Kansas O. & G. Co.'s Ellwood 2, dr 2965 ft. Morrison-Thompson et al's Griffith 1, rig. Owen-Sloan Oil Co.'s C. P. Conwey 1-A, sd 3205 ft. Teas-Stivers et al's Hardee 1, fsh 475 ft. F. P. Zoch et al's J. J. Ford 1, sd 2940 ft.

NOLAN COUNTY — Hucony Gas Co.'s Arthur Sears 1, elevation 1950 ft, cavey hole 2945 ft. Henry Zweifel & Hofmeier's Longbotham 1, dr 285 ft.

PECOS COUNTY — Benedum-Trees' J. C. Trees 1, crooked hole 680 ft. Cromwell & Kimberlin's Blackman-Scharff 1, spd and sd. J. G. Buell-Hagan et al's So. Life Inc. Fee 1, casing off tools 575 ft. Mid-Kansas O. & G. Co. et al's I. G. Yates 1, flowing oil by heads through 12½-inch hole from sandy-lime pay 992-97 ft. Quinby Oil Co.'s Bennett 1, set 12½-inch cas 370 ft; Fort Stockton Townsite 1, co 3280 ft.

PRESIDIO COUNTY — Hadlock-Miller et al's Toole 1, sd 2255 ft.

REAGAN COUNTY—Camp et al's University 1, sd 2786 ft. Cope-Hagan et al's L. H. White 1, lcn. The California Co.'s University 3, dr 250 ft. Hiawatha Oil Co.'s University 1, rig. Moody Oil Corp.'s Sawyer 1, fsh 1450 ft. Texon & Marland Oil Co.'s Sawyer 1, dr with hole full water 2925 ft. Texon Oil & Land Co.'s University 5, Group 2, sd with hole full water 3305-10 ft; University 6, Group 2, rig.

REEVES COUNTY—Deep Rock Oil Co.'s Caldwell 1, rig. Grisham-Hunter Corp.'s State 1, dr 1985 ft. World Oil Co.'s B. T. Biggs-Golder 1, dr 480 ft.

RUNNELS COUNTY—Red Bank Oil Co.'s Fowler 1, dr 1805 ft. F. P. Zoch et al's Bruce 1, re-set cas 1530 ft. Frank Yates et al's McMillan 1, materials. Bell &Moore's W. W. King 1, lcn.

SCHLEICHER COUNTY—Beavers-Leath et al's Whitten 1, spd and sd. Cope-Dalton et al's Sol Meyer 1, dr 2510 ft.

SCURRY COUNTY—Northwest Co.'s T. C. Stinson 1, re-cemented 12½-inch cas 610 ft, td 665 ft.

STERLING COUNTY—The California Co.'s J. T. Davis 1, dr 1205 ft. Co-Operative Dev. Co.'s Douthitt 1-A, sd 3230 ft. The Exploration Co.'s C. A. Broome 1, sd 3200 ft. J. P. Williams et al's Clark 1, spd and sd.

TAYLOR COUNTY—City of Abilene's Fee 1, dr 1785 ft. Sanger O. & R. Co.'s R. H. Anderson 2, dr 2100 ft; Cox 1, dr 1735 ft; Gillespie 1, rig.

TERRELL COUNTY—Sun Oil Co.'s N. M. Scott 1, set 8¼-inch 2600 ft. E. T. Williams et al's Cowden 1, sd with hole full water 2800 ft.

TERRY COUNTY—Kingsland Oil & Land Co.'s Brownfield 1, dr 470 ft.

UPTON COUNTY—Gulf Prod. Co.'s Singer 1, dr gray lime 3515 ft; Shirk 1-E, dr 545 ft. L. E. Hulte et al's Giddings 1, spd and sd. Johnson-McCamey & Atlantic's Shirk 1, spudding. Johnson-McCamey et al's Union 1, rig. Marland Oil Co.'s Reese 1, fsh 150 ft; Powell 1, dr 300 ft; Shirley 1, dr 200 ft; University 1, lcn. Pure Oil Co.'s Shirk 1, lcn. Sartain Bros. & Davis' Mrs. Bull 1, top salt 1660 ft, dr 1765 ft. Skelly Oil Co.'s O. P. Jones 1, elevation 2882 ft, top salt 1761 ft, dr 3560 ft. Texon Oil & Land Co.'s Shirk 1, rig. Texon & Marland Halff 1, elevation 2784 ft, top salt 1440 ft, dr 3100 ft.

CAL VERDE COUNTY—A. Blume et al's Moore 1, set cas 2675 ft. O. O. Owens et al's Mills 1, rig. Douglas Oil Co.'s Sellers 1, rig. Hiawatha Oil Co.'s Sellers 1, spd and sd. Independent Operators' Whitehead 1, sd 3750 ft. Transcontinental Oil Co.'s Stevenson 1, dr 2215 ft. E. T. Williams et al's W. T. Holman 1, dr 370 ft.

WINKLER COUNTY—Ed. S. Hill & Ladd-Simon's Ambrugey 1, dr by tools 700 ft. McCullough Oil Co.'s Tobe Morton 1, dk. R. S. Matthews et al's Cowden 1, dr 800 ft. Llano Oil Co.'s Scarborough 1, lcn. R. A. Westbrook & Co.'s Hendricks 1, dr 2950 ft. F. P. Zoch et al's Sealy 1-A, spudding second hole.

Coastal Wildcats

COMPLETION

Matagorda County—		
Gulf Prod. Co.'s Parkinson 1	*	4560

DRILLING REPORT

BRAZORIA COUNTY—Roxana Pet. Corp.'s Pabst 1-A, Clemens dome, sd 1639 ft in cap rock; Clemens Berna d River 1, Clemens dome, lcn; Clemens 3, Clemens dome, dr 2951 ft in sandy shale and lime; Allen Bernard River 1, Allen dome, dr 2004 ft in gumbo; Allen 3, Allen dome, dr 3323 ft in shale and lime. The Texas Co.'s Mayers 1, Rattlesnake Mound, rigging up.

CHAMBERS COUNTY — Patillo Higgins' Fee 1, SE Barbers Hill dome, sd 950 ft. Osage

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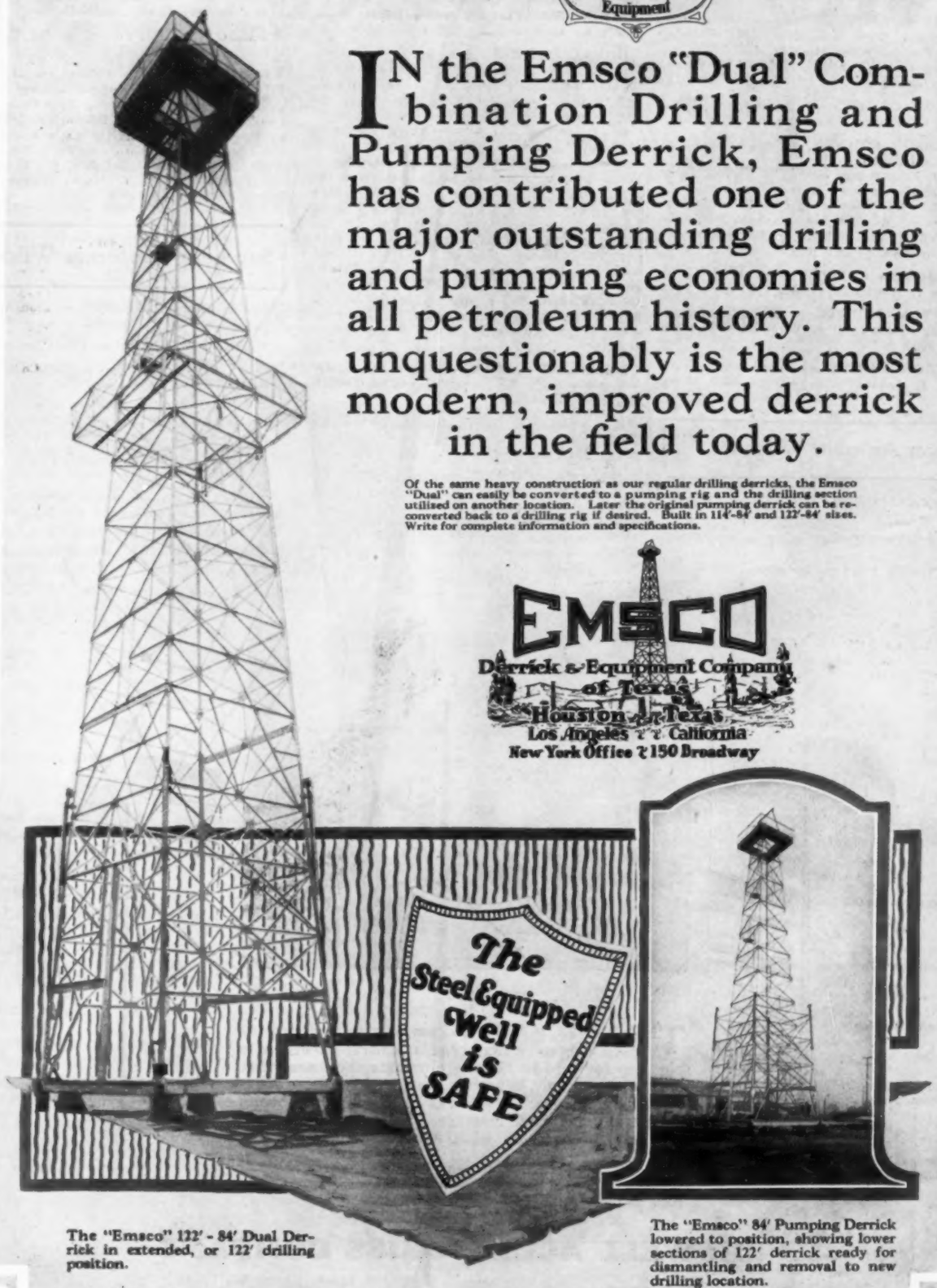

The "Emsco" 122' - 84' Dual Derrick in extended, or 122' drilling position.

The "Emsco" 84' Pumping Derrick lowered to position, showing lower sections of 122' derrick ready for dismantling and removal to new drilling location.

Oil Co.'s State 1, Lake Charlotte, dr 3795 ft in gumbo.

FORT BEND COUNTY—The Texas Co.'s Farmer 1, Boling, dr 4455 ft in gumbo and lime. Sun Co.'s Farmer 1, Boling, sd 1988 ft in cap rock.

GOLIAD COUNTY — Houston Oil Co.'s Park 2, Goliad, dk; Pettus 2, Goliad, dr 3205 ft.

HARRIS COUNTY — Redondo Dev. Co.'s John Lenze 1, Tom Ball, dk. Mike Kater's Crews 1, 5 miles W of Humble, dr 2265 ft in rock. Sun Co.'s Chambers 1, Moss Bluff, dr 2017 ft in sandy shale.

JACKSON COUNTY—L. E. Norton's Fenner 1, C. O. Fenner 676-acre tract, sd 3012 ft.

JEFFERSON COUNTY — Gulf Prod. Co.'s Bordages 2, Fannette, dr 4500 ft in pyrites; Thomas 9, Fannette, dr 3945 ft in gumbo. Port Arthur Development Co.'s West 4, Westburg, sd 1846 ft. New Beaumont Oil Co.'s Garrick 1, Beaumont, dr 2805 ft in shale. T. D. Brooks' Young 1, 5 miles S of Spindletop, dr 2500 ft in gumbo and lime.

MATAGORDA COUNTY—Gulf Prod. Co.'s Parkinson 1, Hawkinsville, abn 4560 ft.

WHARTON COUNTY — Rich-Humphreys Malone 1, 5 miles W of Wharton, will core and abn 2008 ft.

CAMERON PARISH — Humble-Sun Co.'s Peterson 1, Johnson's Bayou, dr 5200 ft in shale.

San Antonio Wildcats

ATASCOSA COUNTY—W. G. French's No. 1 Jaksik dr 3752 ft.

BEXAR COUNTY—B. F. Thompson's No. 1 Weites dr 1515 ft.
Gintes' No. 1 Brackenridge abn at 830 ft.

BASTROP COUNTY—W. L. McClanahan's No. 1 Sodrok dr at 1770 ft.
John Storey's No. 1 dr at 800 ft.

CALDWELL COUNTY—Bristol Oil & Gas Company's No. 1 Demon dr
Simms Oil Co.'s No. 1 Ed Masur abn at 1343 ft.
United North & South Oil Co. No. 1 Kelly dr, No. 1 Tiller, dr.
E. L. Smith Oil Co. No. 1 lcn.
Foster-Reiter Oil Co.'s No. 1 Riddly dr at 1620 ft in shale.

DUVAL COUNTY—Associated Oil Company No. 1 Sutherland dr; No. 1 Beanvides dr. Barkley-Meadows-Morgan No. 3 King Harper dr. Buffum et al blk 38 Mesquite set csg prep to test. No. 1 Benavides preparing to dr. Gulf Production Co. 1 Bramberg survey 8 dr at 812 ft. Humble Oil Co.'s No. 1 Dowdy dr; No. 5 Schallert dr 3428 ft; No. 7 Walsh prep to spud in; No. 1 Becker survey 531 testing; No. 11 Singer dr. O. W. Killam No. 3 Lopez sec 6, blk 9 lcn; Nos. 4, 5 and 6 Lopez blk 18 sec 319 lcn. Mag. Pet. Co. No. 1 Spear, dr. Maurer & Duggan No. 1 Hoffman, dr; No. 3 Cuellar plugging. O'Hern & Seacord No. 3 Benavides survey 174 dr 200 ft; No. 2 Benavides, dr at 2227 ft in shale. G. B. Pickett No. 1 survey 230 dr 2220 ft. Simms Oil Co. No. 1 Schallert sec 241 plugging. Texas Company's No. 1 survey 668 no report.

GONZALES COUNTY—Martin Oil & Development Co.'s No. 1 setting csg at 1440 ft, slight oil showing.

KLEBERG COUNTY—Humble Oil & Refining Co.'s No. 1B Dennett prod 100 bbls; No. 1-C Dennett resumed dr at 2175 ft

MEDINA COUNTY—Armstrong Pat.'s No. 1 Lacey dr. Arnett Oil Co.'s No. 4 Nixon resetting csg. California-Medina Co.'s No. 1 Rothe dr. Fennell et al No. 1 survey 115 dr 770 ft. Golden West Oil Co. No. 1 Courand dr; No. 1 Adams small gas shown at 726 ft. Gibson & Walsh No.'s 1 Oten dr 500 ft. Ina Oil Co.'s No. 1 Finger, dr. Kittle & Townley's No. 1 Bendle dr. R. R. Lewis' No. 1 (Adams pool) dr. Rand et al's No. 1 dr. Western Gas & Fuel Co.'s No. 1 Adams dr. Walsh et al's No. 1 Saathoff dr. Yeager et al's No. 1 dr.

STARR COUNTY — Deckle & McCarley's No. 1 Garcia dr. T. C. Hadley's No. 1 M. M. Garcia survey 538, dk. L. Pearson et al's No. 1 Pefley dr. Southern Exploration Co.'s No. 1 Fee Porcion 69 dr.

WILSON COUNTY—Rosalie Oil Co.'s No. 1 Dunning, prep to bail.

ZAPATA COUNTY—Killam No. 1 survey 307 dr. Maurer & Duggan survey 123 of Cuellar plugged. Magnolia Pet. Co.'s No. 2 Cuellar dr. Malone' & Burns No. 1 Bissonet moving in tools Trees Oil Co.'s No. 1 Benavides standing. Texas Company's No. 3 Jennings coring at 4020 ft. W. R. Duke's (Evangeline Oil Co.) No. 1 in the Charco Rendendo prep dr 400 ft.

Southern California Wildcats

ALAMITOS HEIGHTS — Pan-American Pet. Co.'s Collins 1, material on ground.

ATHENS-WEST—Julian Pet. Corp.'s Mosier 1, dr 3500 ft.

BANDINI—Pan-American Pet. Co.'s Bandini 1, stg cwt 1305 ft.

BELLFLOWER—Marine Oil Corp's Strong 1, dr 5660 ft.

BURBANK—Jeffries-Overton's No. 1, sd 1300 ft.

BIXBY HILLS—National Security Co.'s No. 1, sd 5151 ft. Orange Co. Oil Co.'s No. 1, sd 2820 ft.

CLEARWATER — Featherstone-Preston's Blinn 1, sd 4185 ft.

Straight Lift
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Machined Bearings
+
Easy to Install
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Reduces Losses
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Unit Assembly
+
All Steel Construction
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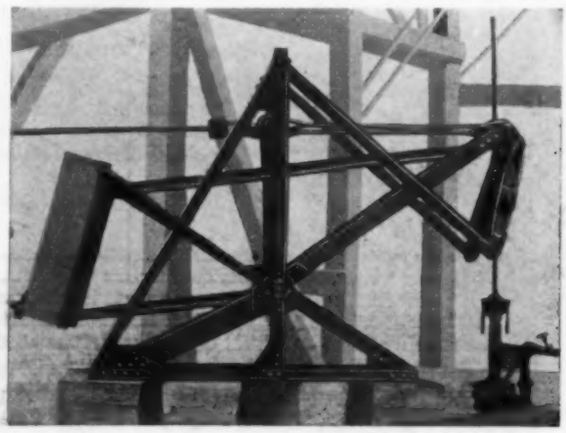
Removable Bearings



Reduces Friction
+
Reduces Shocks
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Slow Starting Motion
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Long Stroke
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Easy Stroke Adjustment
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Large Oil Reservoirs
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Positive Lower Stop

THE No. 36 MASTER Pump Jack designed to pump deeper wells from a central power is a big step forward in helping eliminate the losses that cost you money. Whether they be loss of production, frictional, or actual loss of production; by its design and exclusive features the Master Pump Jack will pay for itself on what it saves in losses.

This Jack is worthy of your careful investigation it will more than likely be the means of greatly cutting your production costs.

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A REAL JACK

THOROUGHLY TESTED IN HUNDREDS OF INSTALLATIONS in Oklahoma, Kansas, Texas, New Mexico, Arkansas, Wyoming and Louisiana. IT IS SIMPLY A BEAM WITH THE WELL ON ONE END AND COUNTERWEIGHT ON THE OTHER, AND A LEVER TO HOOK TO THE PULL RODS FOR OPERATING.

CAPACITY OF BEAMS

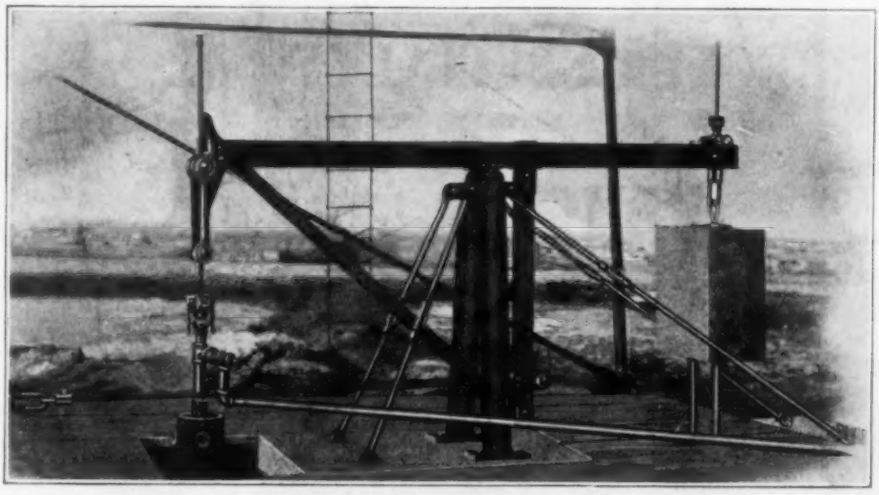
No. 10 has a 10 ft. Beam, 5 ft. from Samson Post Bearing to Polish Rod and 5 ft. to Counterweight. Will handle wells of 2000 ft. or less with a fluid output of 100 bbls. Stroke 18 to 36 inches. Is equal to a No. 5 Standard Jack. Weight 900 Lbs.

No. 12 with a 12 ft. Beam, is 6 ft. from Samson Post Bearing to Polish Rod and same to the Counterweight, and will handle wells up to 3500 ft., with a fluid output of 150 bbls. or more. Stroke 18" to 40 inches. Weight 1700 Lbs.

No. 14 Same as No. 12 except it is 8 ft. from Samson Post Bearing to the Counterweight. Same capacity and setting as No. 12. Weight 1750 Lbs.

No. 16 With a 16 ft. Beam, 8 ft from Samson Post Bearing to Polish Rod and 8 ft. to Counterweight. Will pump wells of 3500 ft. Fluid output 235 bbls. Stroke 18" to 50 inches. Weight 1825 Lbs.

Above capacities are based on wells with 2" Tubing. Larger tubing should be figured proportionately.



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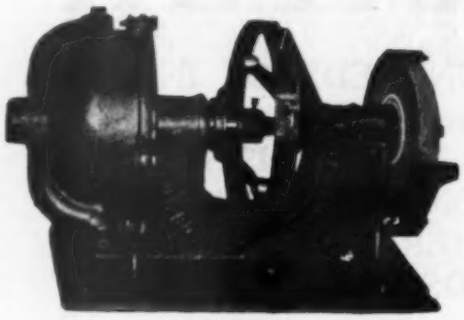

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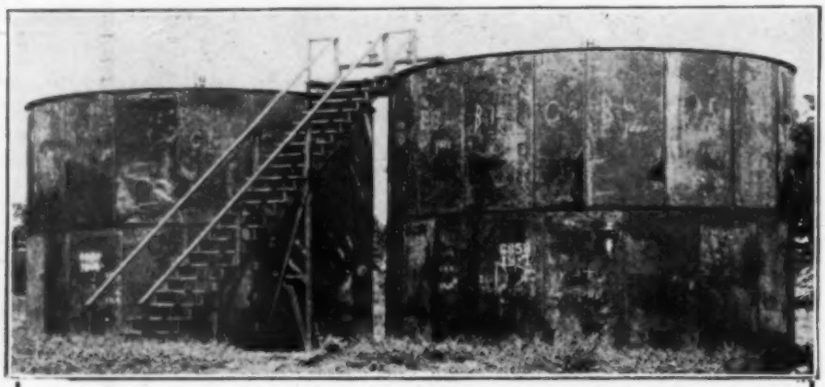

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Sizes 12 to 3,000 Bbls.
Packed in Steel-Bound Crates for Export

MADE OF KEYSTONE COPPER STEEL

MALONEY

CLAREMONT—Claremont Oil & Gas Co.'s No. 1, co 1110 ft.

DOMINGUEZ—Dominguez Extension Oil Co.'s well, dr 2560 ft.

EAGLE ROCK—Calwin Oil Co.'s No. 1, dr 6089 ft.

EL SEGUNDO—Rider Synd.'s well, dr 2300 ft.

HAWTHORNE—Winwell's Dome, bailing 5586 ft.

INGLEWOOD—Associated Oil Co.'s Cypress, dr 4040 ft.

IRVINE—Calny Oil Co.'s Irvine 1, sd 4247 ft.

LAWNDALE—Smith Pet. Co.'s Johnson 1, dr 5135 ft.

LANCASTER—Rudd-Asmussen's No. 1, will install rotary 1860 ft.

LONG BEACH—Miller-Haley's Extension 1, sd 4865 ft.

MANHATTAN—Bardeen Oil Co.'s No. 1, stg. 4409 ft.

MAYWOOD—Magnolia Pet. Synd.'s Tweedy 1, stg 4442 ft.

NEWHALL-SAUGUS—George W. Johnston's Wickham 1, building rig. Temple-Lefevre's Castaic 1, sd 2107 ft. W. W. Stabler's Castaic 1, dr 2788 ft. Union Oil Co.'s Saugus 1, dr 4620 ft.

PACOIMA—W. O. Brubaker's Fernando 1, sd 2698 ft.

PLAYA DEL REY—Milham Exploration Co.'s No. 2, smt 5538 ft.

RESEDA—Petroleum Securities' Seson 1, dr 4557 ft.

SPADRA—Spadra Oil Co.'s Northey 1, dr 528 ft.

SAN FERNANDO—Standard Oil Co.'s University 1, dr 4610 ft.

SAN JOSE HILLS—Bardeen Oil Co.'s Didier 3 sd 1938 ft. D. & B. Oil Co.'s Amar 1, dr 3255 ft.

SAN JUAN CAPISTRANO—California Pet. Pet. Dev. Co.'s Spitz 1, dr 2560 ft.

SUNSET BEACH—General Pet. Corp.'s Lomita 1, foundation for rig completed.

TELEGRAPH CANYON—Quadra Pet. Co.'s MJM 1, dr 4130 ft.

TOPANGO—Standard Oil Co.'s Austin 1, dr 1715 ft.

VAN NUYS—Van Nuys Comm. Oil Co.'s No. 1, co 3860 ft.

RIVERSIDE COUNTY—Banning Oil Co.'s No. 1, sd 974 ft. Corona Oil & Gas Test's 1, dr 1470 ft. Spindletop Oil Synd.'s No. 1, sd 2590 ft. Trabuco Oil Co.'s No. 1, dr 1760 ft.

SAN BERNARDINO COUNTY—Arrowhead Dev. Co.'s No. 1, prep to test 1600 ft. Burgess-Goodale-Riggins No. 1, plan to test 4110 ft. Como Oil Co.'s No. 1, stg 1380 ft. Colton Terrace No. 1, dr 1117 ft. Del Rosa Oil Co.'s No. 1, sd 2460 ft. H. & P. Oil Co.'s Ranger, sd 1963 ft. Hesperia Oil & Gas Co.'s 1A, dr 3312 ft. Mahala Oil & Gas Co.'s No. 2, prep to abn 5080 ft. Victor Valley Landowners' No. 1, sd 1740 ft. Wade-Bourne-Aldhal's Shoe 1, dr 600 ft. Western-Pacific Oil Co.'s No. 3, dr 1550 ft.

SAN DIEGO COUNTY—Cardiff Oil Corp.'s No. 1, dr 1050 ft. Oceanside Oilwell Co.'s No. 1, dr 3126 ft. Torrey Pines Oil Co.'s No. 1, rigging cable tools.

Arkansas Wildcats

COMPLETIONS

Union County—		
Wingfield et al's McGough 1, 22-17-13	*	3105
Walber et al's Cordell 1, 6-18-13	20	2984

DRILLING REPORT

BRADLEY COUNTY—Arkansas Fuel Oil Co.'s Arkansas Lumber Co. 1, 25-16-12, dr 815 ft. Magnolia Pet. Co.'s Arkansas Timber Co. 1, 35-15-11, sd 3230 ft. McMurray et al's Southern Lumber Co. 1, 7-15-11, sd 3255 ft. Phillips Pet. Co.'s Southern Lumber Co. 1, 36-11-16, dr 2740 ft.

COLUMBIA COUNTY—Gulf Ref. Co.'s Huggins 1, 31-17-22, dr 1720 ft. Haynes et al's Runyon 1, 3-16-21, rig. Ky.-Ark. Pet. Co.'s Doss 1, 29-19-20, dr 6-inch plug 2600 ft. Pluto Oil Co.'s Dickens 1, 20-19-22, dk. Scott Phillips' Davis 1 6-18-20, sd 2000 ft.

DREW COUNTY—McClintock et al's Ogle 1, 35-13-5, sw 2530 ft, testing 2650 ft.

"Brutes for Punishment in grueling use or accidental abuse"

Say Continual Reports from Field Men Using

D+B Sucker Rods *with the* WHITWORTH THREAD

RIGHT where the wear and strain concentrate is where you need super-strength in your sucker rods. The Whitworth Thread on D. & B. Sucker Rod Pins gives this added strength because of their scientific design and steel made to a special D. & B. formula. The Whitworth threads actually show a tensile strength much greater than the strength of the rod itself. The design of these threads make possible the tightest connection between rods and couplings. There's no lee-way for twisting or wiggling—no chance for stripping.

THREADS on a sucker rod pin may seem like a little thing to make so much fuss about, but just think of the fuss that's made when a coupling goes wrong! (Sturdy Steve.)

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BRANCH STORES: COALINGA, BAKERSFIELD, TAFT, TORRANCE, SIGNAL HILL & SANTA FE SPRINGS, CALIF.

GRANT COUNTY—Jones & Watkins' Meek 1, 5-4-11, dk pat.

HEMPSTEAD COUNTY—Burton et al's Garland 1, 23-10-25, fsh 2210 ft. Myers et al's Nicholls 1, 17-11-25, sdtr 2260 ft.

JEFFERSON COUNTY—Decem Oil Co.'s Hensley 1, 7-3-10, dr 2580 ft.

LA FAYETTE COUNTY—Arkansas Fuel Oil Co.'s Allen 5, 18-19-24, wosr 2788 ft. Ken-Saw Pet. Co.'s Red River 2, 3-20-24, sw 2840 ft.

LITTLE RIVER COUNTY—Greeson et al's Waldrip 1, 4-13-21, sd 1740 ft. Grote et al's Allen 1, 2-13-29, sw 2941 ft. Johnson et al's Hawkins 1, 10-11-31, set 6-inch 1935 ft.

MILLER COUNTY—Lenze et al's Dale 2, 28-15-26, dr 1125 ft.

NEVADA COUNTY—Fruen et al's Fuller 1, 6-13-21, set 6-inch 1200 ft. Humble Oil & Ref. Co.'s Bodcau 4, 9-15-22, dr 3100 ft.

OUACHITA COUNTY—Grayson et al's Reynolds 1, 21-14-17, dk. Van Diver et al's Yarbrough 1, 22-14-17, sw, fsh 2724 ft.

UNION COUNTY—Allison et al's Howard 1, 8-19-13, sd 15 ft. Belmont et al's Hollis 1, 15-18-15, sd 2219 ft. Calgo Oil Co.'s Primm 1, 9-18-17, dr 2130 ft. Grimes & Jones' Van Hook 1, 8-18-14, wosr 2254 ft. H. L. Hunt's Dykes 1, 21-18-12, to set casing 2674 ft. Mathews et al's Lewis 1, 14-19-12, set 6⅝-inch 2650 ft. Marine Oil Co.'s Thompson 1, 10-18-13, gas blow-out 2537 ft, to rebuild dk. Mullen Trust's Hill 1, 10-18-16, show oil and gas 2197 ft, testing 2215 ft. Simms Oil Co.'s Simmons 1, 9-18-13, plugged back to 2800 ft. Southern C. O. P. Co.'s Hill 1, 5-18-13, dr 2305 ft. Superior Oil Co.'s Cordell 1, 5-18-13, dk. Wingfield et al's Morrison 1, 5-19-13, set 12½-inch 105 ft.

Louisiana Wildcats

Company, Well and Location	Initial Production Bbls.	Depth
COMPLETIONS		
Bienville Parish—		
Collins & Woodley's Thomas 1, 23-16-10	*	2622
Caldwell Parish—		
Wright et al's Love 1, 16-11-2e	*	1625
East Carroll Parish—		
T. A. Snell's Gordon 1, 34-20-2e	*	1692
La Salle Parish—		
Tunica Pet. Co.'s L. & A. Oil Co. 13, 25-8n-1e	*	2105
Natchitoches Parish—		
Brothers et al's Cockfield 1, 78-7-8w	*	1882
Keator et al's Pearson 1, 46-8-6w	*	1578
Union Parish—		
Gulf Ref. Co.'s Nelson 1, 5-19-1e	*	3055

DRILLING REPORT

BIENVILLE PARISH—Kimbrough et al's Cargyle 1, 27-15-8, dk.

BOSSIER PARISH—Collins & Woodley's Roberson 1, 22-23-12, dr 1880 ft. Doern et al's Bolinger 1, 9-22-11, plugged back to 2673 ft.

CADDO PARISH—Dixie Oil Co.'s Jolley 1, 27-22-15, fsh 4415 ft; Slattery 10, 27-21-15, dr 3395 ft. Magnolia Pet. Co.'s Bradford 1, 24-21-15, dr 4040 ft; Dillion 16, 24-21-15, sd 3676 ft. Ohio Oil Co.'s Caddo Levee Board 1, 28-23-16, dr 575 ft. The Texas Co.'s C. M. L. 42, 23-21-15, dr 3865 ft.

CATAHOULA PARISH—S. D. Hunter's Tensas Delta 1, 36-10-7e, dr 460 ft.

CALDWELL PARISH—Robbins et al's Beazley 1, 10-11-4e, sd 1020 ft. Southern C. O. P. Co.'s Caldwell A-5, 23-13-5e, sd 785 ft. Hincy & Mack's Shaw 1, 22-14-4e, dr 400 ft. Victor Wenzel's Caldwell 1, 22-14-4e, lcn.

CLAIBORNE PARISH—Gilliland Oil Co.'s (Ramsey) Taylor B-10, 14-23-8, dr 4970 ft. Triangle Drlg. Co.'s Caskey 1, 7-19-5, rig; Keen 1, 7-19-5, sd 4662 ft. Underwood et al's Bullock 1, 2-20-7, rig.

DE SOTO PARISH—Clarke & Melat's Billingsley 1, 12-11-16, set 12½-inch 186 ft. Craige & Montze's Riggs 1, 28-15-13, sd 1380 ft. Dixie Oil Co.'s Jenkins 1, 9-12-11, setting 4½-inch 4863 ft. Helm et al's Joyner 1, 28-11-12, dr 1340 ft. Snapp et al's Flores 1, 27-11-11, dry, show gas 2916 ft; dr 3025 ft.

EAST CARROLL PARISH—T. A. Snell's Nicholson 1, 25-20-12e, set 8-inch 117 ft.

FRANKLIN PARISH — Arkansas Fuel Oil Co.'s Blue 1, 9-12-6e, dr 430 ft. Roxana Pet. Co.'s Senseman 1, 18-14-7e, lcn. R. W. Williams' Elkhart-Lemon 1, 17-14-8e, dr 1780 ft.

GRANT PARISH—Ayers et al's Blackshear 1, 6-9-1e, dk pat. Billeaud et al's Ball 1, 19-7-1e, dr 1050 ft. Gulf Ref. Co.'s Swope 2, 17-9n-1e, sw 1610 ft. Holmes et al's Holmes 1, 17-9n-1e, dk; Holmes A-1, 17-9n-1e ,dk pat. J. L. Holmes' Fee 2, 17-9n-1e, dk. Humble Oil & Ref. Co.'s L. & A. Oil Co. 11, 29-9n-2w, lcn. Keen & Woolf's Rider 1, 16-9n-1e, sd 2000 ft. J. J. Long's Calhoun 1, 4-7-4w, sd 1285 ft. Tunica Pet. Co.'s L. & A. Oil Co. 8, 11-8n-2w sd 250 ft; L. & A. Oil Co. 9, 3-8-2w, dk; L. & A. Oil Co. 10, 8-8-1w, dk.

JACKSON PARISH—El Dorado Chief Oil Co.'s Jones 1, 3-14-4w, sd 2610 ft. Ferguson Trust's Martin 1, 3-15-1e, sd 2943 ft. Grigsby & Co.'s Adams 1, 22-17-4w, sd 2400 ft. Houseman et al's Norton 1, 34-15-3w, sd 400 ft. Louisiana Pet. Co.'s Theus 2, 12-16-3w, sd 1500 ft. Raymond et al's Davis 1, 13-16-2e, rig.

LA SALLE PARISH—Tunica Pet. Co.'s L. & A. Oil Co. 14, 29-7-4e, dr 1680 ft; L. & A. Oil Co. 15, 7-8-2e, rig.

LINCOLN PARISH — Arkansas Fuel Oil Co.'s Nobles 1, 18-19-3w, dr 1000 ft. Buckley & Palmer's Davis 1, 12-20-3w, dr 2735 ft.

NATCHITOCHES PARISH — Forrest Trust's Ayers 2, 3-13-7, sd 1900 ft. Gulf Ref. Co.'s Louisiana Long Leaf A-1, 39-7-7, dr 1950 ft. Lawson et al's Clark-Morse 1, 23-5-6w, lcn. McCormick et al's Russell 1, 41-10-7 dr 1840 ft. Ohio Oil Co.'s Louisiana Long Leaf 2, 20-8-8w, dr 1260 ft. J. F. Palmer's Edenborne 1, 4-11-6, sd 2015 ft. E. Self's Fisher 1, 18-8-9w, fsh 2740 ft. The Texas Co.'s Moss 1, 31-7-8w, dr 1425 ft.

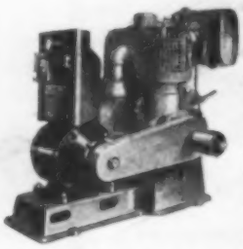
OUACHITA PARISH—Ouachita N. G. & O. Co.'s D'Arbonne 2, 25-19-2e, r 2380 ft.

RAPIDES PARISH—Hincy & Mack's Barrow 1, 29-5-2e, sd 2800 ft. Minnesota Oil Co.'s Wattermark 1, 7-5-3w, sd 600 ft. Libuse O. & G. Co.'s Voda 1, 12-4-1e, dr 1950 ft. Seip et al's Ball 1, 41-4-2w, dr 2550 ft.

RED RIVER PARISH—S. M. Cagle's Long Bell 1, 5-13-9, rig. The Texas Co.'s Marston 1, 16-14-11, rig.

MARCO ELECTRIC POWER and LIGHT PLANTS

SUPER POWERED by the 8 H.P. "New-Way" AIR-COOLED ENGINE



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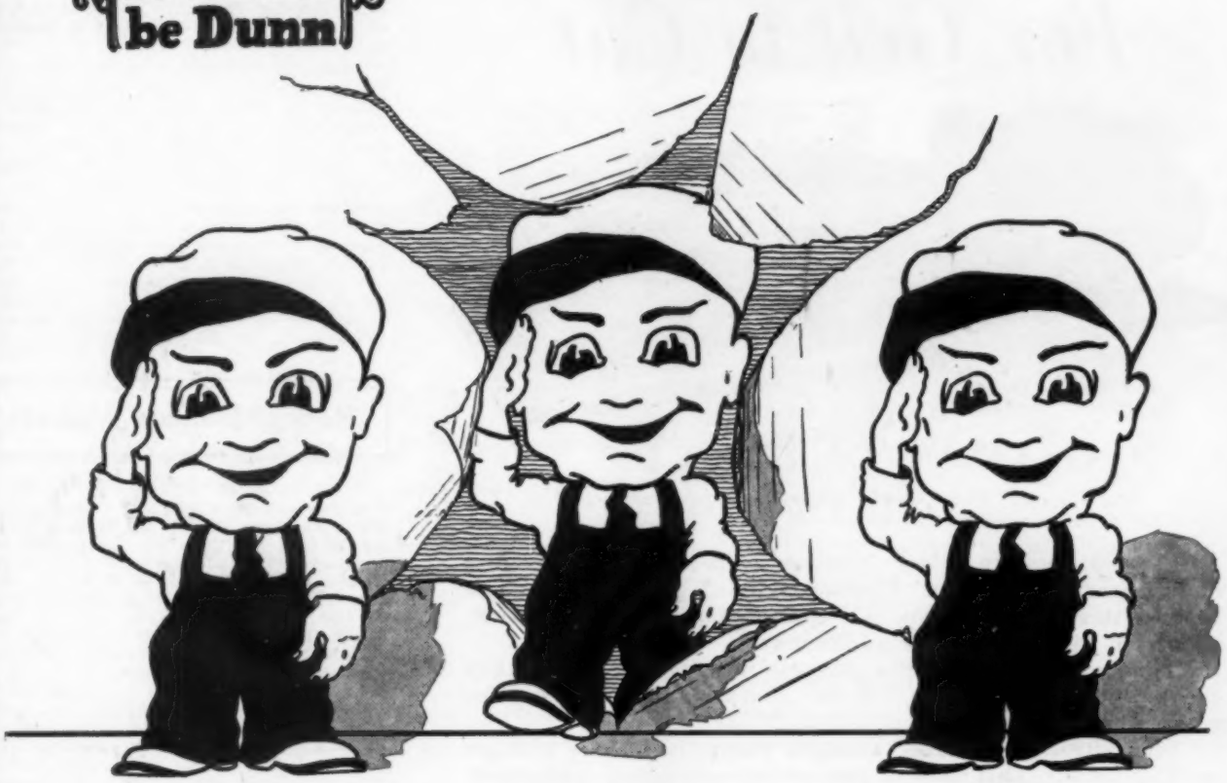
TRADE MARK REG.

it hadta' be Dunn



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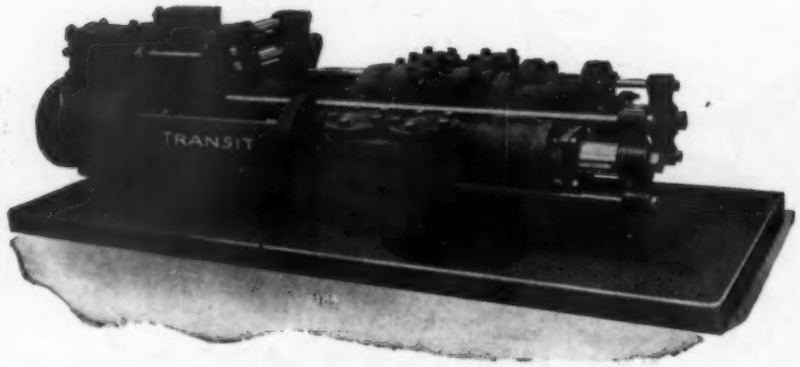

Fig. 117
12 x 4½ x 12" End Packed Plunger Pump for pressures up to 600 pounds. Capacity 115 barrels per hour.

The plungers are held in position by packing and therefore do not wear the cylinders. Fluids containing grit can be handled best by this type of pump. Of course, the packing will wear, but it can be easily and cheaply renewed.

After years of service the plungers may wear also, but they can be trued up easily in a lathe; and the pump is ready for years of service again.

TRANSIT End Packed Plunger pumps have long plunger stuffing boxes. This reduces wear of both packing and plungers

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RICHLAND PARISH—Aarnes et al's Hawley 1, 3-18-9e, dk pat. Gulf Ref. Co.'s England 1, 32-17-6e, dr 2125 ft; Weyman 1, 23-18-8e, dr 2990 ft. Oliver et al's Hatch 1, 2-15-5e, dk pat. Roxana Pet. Co.'s Humble 1, 10-15-6e, dr 1090 ft.

SABINE PARISH—Emlet et al's Bowman-Hicks 5, 8-7-12, sd 4070 ft; Bowman-Hicks 7, 11-7-14, sd 2121 ft; Sabine Lumber Co. 1, 8-7-1e, dk. Godchaux et al's Mills 1, 12-4-13, dr 1620 ft. Magnolia Pet. Co.'s Louisiana Long Leaf 1, 16-6-11, dr 1880 ft. Lewis Pet. Co.'s (Reliance) Wyatt 1, 23-5-12, dr 800 ft.

UNION PARISH—Camette et al's Tugwell 1, 21-22-1e, dk. Ohio Oil Co.'s Henricks 1, 30-19-1e, dk. Rhodes et al's Futch 1, 28-23-2w, dk.

WEBSTER PARISH—J. R. Garrison's Hudson 1, 17-19-10, rig. Labore et al's Bruner 1, 30-19-10, sd 278 ft. Ohio Oil Co.'s Bank of Cotton Valley 4, 22-21-10, dr 3530 ft. Smitherman & McDonald's Oakley 1, 29-23-11, dr 4970 ft. Southern Crude Oil Purch. Co.'s Munn-Wadley 1, 1-22-10, sdtr 4250 ft.

WINN PARISH—Allen Drilling Co.'s Sanders 1, 21-13-2w, dr 1770 ft. Dodge et al's Tremont 1, 35-13-3w, rig. Humble O. & R. Co.'s L. & A. Oil Co. A-15, 26-10-2w, dr 1460 ft. Hyde & Nelson's Louisiana Central Lumber Co. 1, 16-13-1w, rig. J. C. Long's Milam 1, 28-13-3w, set 6-inch 684 ft. Ohio Oil Co.'s Edenborne 1, 4-12-1w, sd 2675 ft.

Rocky Mountain Wildcats

WYOMING

McPherson Oil Co.'s No. 1 Sand Draw, NW¼ 2-44n-96w, dr 1800 ft. Portland-Wyoming Oil Co.'s No. 1, Carbon County, SE¼ 21-26-86, sd 1740 ft. Hollingsworth Oil Co.'s No. 1, Mule Creek, NE¼ 2-39-61, dr 300 ft. Tarrant Syndicate's No. 2, Steele Creek, 17-46-82, dr 3385 ft. Bridger Oil Co.'s No. 1, Sage Creek, SE¼ 21-1-1, dr 1780 ft. Midwest Ref. Co.'s No. 1, Dutton Creek, 1-18-78w, dr 4940 ft with some oil; No. 1, La Barge, 21-27-113, dr 840 ft. Texas Production Co.'s No. 5, Maverick Springs, 26-6-101, sdtr 3075 ft; No. 1, Big Sand Draw, 15-32-95, sdtr 3075 ft. Union Oil Co. of California's No. 1, Park County, NE¼ 9-46-101, dr 2080 ft; No. 14, Maverick Springs, SE¼ 15-6-2, dr 475 ft; No. 1-C, Fremont County, NE¼ 15-5-1, dr 1920 ft; No. 1-G, Fremont County, SE¾ 27-1-1, dr 568 ft; No. 1-A, Black Mountain, NW¼ 34-43-91, dr 1810 ft; No. 1-AB, Black Mountain, NW¼ 28-43-91, dr 1920 ft. Ohio Oil Co.'s No. 2 Byron, 33-56-97, dr 1717 ft; No. 1, Hidden dome, 31-48-90, fsh 2785 ft. Producers & Refiners Corp.'s No. 5, Big Sand Draw, 10-32-95, dr 3320 ft; No. 7, Big Sand Draw, 14-32-95, dr 2130 ft; No. 19, Ferris, 25-26-87, dr 400 ft; No. 5, Wertz, 7-26-89, dr 3610 ft; No. 1, Parco, 21-21-86, dr 650 ft; No. 1, St. Mary's, 14-21-28, dr 890 ft; No. 1, Murphy dome, 8-43-91, dr 2550 ft; No. 2, Clay Basin, 22-3-24, ur 5400 ft; No. 2, Eight Mile Lake, 35-20-88, dr 3960 ft; No. 19, Ferris, 11-26-90, dr 780 ft. Prairie Oil & Gas Co.'s No. 2, Buffalo Basin, 17-27-95, dr 2600 ft; No. 1, Gooseberry, 32-47-100, co 3652 ft. Carter Oil Co.'s No. 1, Nowood, SW¼ 5-48-90, dr 1082 ft; No. 1, Horse Creek, NW¼ 35-17-70, dr 3000 ft. Utah Oil Refining Co.'s No. 1FC, Hot Springs County, 26-43-91, dr 2810 ft; No. 1A, Hot Springs County, 5-42-90, dr 950 ft; No. 2S, Hot Springs County, 36-43-91, dr 720 ft; No. 2W, Hot Springs County, 35-43-91, dr 1175 ft.

COLORADO

Moffat Petroleum Co.'s No. 1, Moffat County, 13-4-92, dr 1775 ft. Timpas Dome Syndicate's No. 1, Otero County, 29-26-57, dr 335 ft. Repollo Oil Co.'s No. 1, Boulder County, 33-1-70, dr 4852 ft. Midwest Refining Co.'s No. 4, Moffat County, 22-4-92, dr 2665 ft. Durango Oil & Gas Co.'s No. 1, La Plata County, 35-36-9, dr 300 ft. Tidewater-Associated Oil Co.'s No. 1, Rio Blanco County, 24-2-103, dr 2850 ft. Gypsy Oil Co.'s No. 1, Garfield County, 5-8-102, dr 3672 ft. Dutton & Lightner's No. 1, La Plata County, NW¼ 10-34-11, lcn. Marland Oil Co.'s No. 1, Moffat County, 16-3-91, running 6¾ cas, td 1928 ft; No. 1, Moffat

County, 34-4-92, dr 2135 ft. Continental Oil Co.'s No. 1, Jackson County, 12-9-79, dr 4602 ft.

NEW MEXICO

Hub Oil Co.'s No. 1, Valencia County, 13-6-2w, dr 3316 ft. Navajo Oil Co.'s No. 2, Eddy County, 28-17-28, dr 1716 ft; No. 1, DeBaca County, 16-1-27, dr 2002 ft; No. 1, Guadalupe County, 10-3-17, dr 740 ft. Santa Fe Oil Co.'s No. 3, Santa Fe County, 3-13-15, dr 965 ft. Congress Oil Co.'s No. 1, San Juan County, 34-29-11, dr 1681 ft. Union Oil & Mining Co.'s No. 2, San Juan County 8-29-9, dr 3040 ft. Inglefield Interests' No. 1, Lea County, 4-17-34, fsh 1385 ft. Cap Rock Oil Co.'s No. 1, Lea County, 11-16-32, dr 718 ft. Pueblo Oil Co.'s No. 1, Eddy County, 33-17-28, commercial production, td 2185 ft. Maljamar Oil & Gas Co.'s No. 1, Lea County, 16-17-32, dr 1300 ft. Jones & Newberry's No. 1, Torrance County, 7-6-8, dr 200 ft.

UTAH

Crescent Eagle Oil Co.'s No. 1, Crescent, no description given, sd to make test, td 3200 ft. Embar Oil Co.'s No. 1, Moab, 34-26-21, co 2871 ft. Boulder Knoll Oil Co.'s No. 1, Boulder Knoll, 17-34-24, sd 1202 ft. Utah Petroleum Co.'s No. 1, Gibson, 1-30-29, running 15-inch cas, td 502 ft. Utah Southern Oil Co.'s No. 1, San Juan County, 30-40-18, dr 325 ft; No. LH, 16-28-20, Lockhart, dr 206 ft. Empire Petroleum Co.'s No. 1, Moab, 20-25-21, lcn, wosr.

Oklahoma Wildcats

BECKHAM COUNTY — Magnolia's No. 1, NEc 21-9-23, lcn; No. 1, NEc SE NE NW 29-9-23, dr 690 ft.

CADDO COUNTY — W. J. Hartley's Calbreath 1, SEc NW SE 28-5-12, dr 3300 ft. Abernathy's No. 1, C NE NW 8-5-11, lcn; No. 1, C SW NW 23-5-11, running 10-inch, td 1100 ft.

CANADIAN COUNTY—Nannum, Frank & Slick's Pazourock 1, SW NE 29-13-5, sd 3889 ft.

CIMMARRON COUNTY — Ramsey Bros.' No. 1, C NW NE 27-5-5, dr 1532 ft. Fenton, Brokins et al's Smaltz 1, SEc NE NE 2-29, sd.

COMANCHE COUNTY—Cherry & Couch's Ritchie 1, NWc SW 19-2-9, 10 barrels 1820 ft.

GARFIELD COUNTY—Sinclair's Meyers 1, C SE NE 10-24-4, set 6-inch 3465 ft. Shaffer & Amerada's Bunker 1, NEc 32-24-4, dr 4625 ft. Haley, Garber & Pulse's Chevekier 1, NWc SW 6-23-4, dr 4238 ft. Sinclair's Fee 1, SWc SW NE 2-20-5, dr 3367 ft.

GRANT COUNTY—Ostot Dev. Co.'s Snyder 1, NEc 6-28-3w, sd 4330 ft. Barzell & Moses' Royce 1, SWc NW 34-28-4, sd 550 ft. Dedman, Flenngan & Hennage's Sherran 1, NEc SW 16-26-3, sd 1910 ft.

HUGHES COUNTY—Sand Pet. Co.'s Harnage 1, C SE SE SE 10-8-9, dr 3376 ft. Magnolia Pet. Co.'s Medore 1, NWc SW 28-8-9, co 3565 ft. Sorry & Swartz's Wallace 1, SEc NW SE 4-8-11, plugging 3475 ft. Johnson et al's Bear 1, SWc SE NW 32-8-11, plugging to 1575 ft.

KIOWA COUNTY—A. C. Varner's Boham 1, SEc SW NW NW 5-6-18w, sd 1127 ft.

KINGFISHER COUNTY — Marland Oil Co.'s No. 1, SWc NW 12-18-5, ur 6-inch 4160 ft. Pet. Eng. Core Drlg. Co.'s Canfield 1, C. NW SE 6-16-7, rig. McKenna & Crawford's Sturgeon 1, NEc SW 27-16-6, repairing rig 1685 ft. Hoffman et al's Ottie 1, NWc NE 20-13-8, rig down. Reiter & Foster's Davidson 1, SWc 23-15-5, rig.

KAY COUNTY—Tom Palmer et al's Barclay 1, NEc NW 28-26-1, sd 4114 ft. Ponco Lee Oil Co.'s McNeal 1, NE 32-26-2e, fsh 2350 ft. Tonkawa Dev. Co.'s McDaniels 1, C SE SE SE 15-25-1, sd 1140 ft. Ma land Oil Co.'s School land 1, NEc NW 15-25-2, pulling cas 4046 ft.

LINCOLN COUNTY — Wentz Oil Corp.'s Lukenbeal 1, SWc SE 34-17-2, ur 3165 ft. Mid-Kansas Oil & Gas Co.'s Griswold 1, NEc NW 33-17-4, dr 3980 ft. Olean Pet. C 's Morris 1, SEc NW NE 18-16-4, fsh 4534 ft. Wilcox O. & G. Co.'s Lillibridge 1, NEc NW 25-15-3, plugging 4764 ft.

LOGAN COUNTY—Brayn & Emery's Scott

Upper—Steam Reciprocating Plant and crew
Lower—Byron Jackson Multiplex Station and crew

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1, NWc SE 33-19-4, dr 1035 ft. Carter Oil Co.'s Rogers 1, SWc NW 32-19-3, dr 3950 ft. Franklin Oil & Gas' Moore 1, SWc SE 28-18-4, dr 4029 ft. Santrock Drilling Co.'s Mathews 1, SW SE 11-18-3, rig. Haley & Pioneer's Quair 1, SWc SE 11-18-3, rig burned. Zingery et al's Barker 1, NWc NE NE 5-17-1, std 3500 ft. T. B. Slick's Berry 1, SWc SE 28-17-1, cementing 10-inch 2399 ft. Blackford O. & G. Co.'s Liar 1, C S L N½ SE 28-16-1, sd 1675 ft.

PAYNE COUNTY — Twin State Oil Co.'s Tibler 1, NEc NW NE 23-18-1, dr 1634 ft.

LOVE COUNTY — Schermerhorn-Ardmore's Dillard 1, SEc NE NW 25-6-2, dr 3890 ft.

OKFUSKEE COUNTY — T. A. Johnson's Leady 1, NEc SE SE 25-12-9, dr 1200 ft. J. M. Kessle's Scott 1, SWc 8-12-11, sd 1500 ft. J. W. McCullough's Carolina 1, NE NW SE 17-10-9, cd 3470 ft.

POTTAWATOMIE COUNTY — Shaffer et al's Ives 1, NWc SE SE 12-10-3, sd 3620 ft. McCullough's Madgett 1, NWc 23-10-4, dr 4190 ft. Tidal Osage's Kenyon 1, SWc SE SE 3-8-4, ur 4085 ft. Magnolia's Fyke 1, NWc NW 20-7-5, ur cas 3320 ft.

SEMINOLE COUNTY — Carter Oil Co.'s Harjocke 1, NEc NW NW 26-10-6, co 2440 ft. Superior Oil Co.'s Noble 1, SEc SW SE 10-9-6, dr 3020 ft. Pure Oil Co.'s Joah 1, C E L NW NE 15-9-7, dr 2952 ft. Magnolia Pet. Co.'s Strother 1, SEc NW 17-8-6, skidding rig. Empire G. & F. Co.'s Litka 1, SWc SW 3-7-6, sd 3663 ft. I. T. I. O. Co.'s Litka 1, C NE NE 9-7-6, sd 2781 ft. Magnolia's Jackson 1, SWc NE 2-7-7, sd 2164 ft.

TILLMAN COUNTY — Barnesdall's Dixon 1, C NW SE 11-4-18, moving in. Ossie Drilling 1, SEc SE SE 13-1-18, sd 1525 ft.

TEXAS COUNTY—Valerins O. & G. Co.'s No. 1, NWc SW 18-3-12, dr 3100 ft; No. 2, SEc SE 32-5-12, dr 3685 ft. H. F. Wilcox's Zea 1, SWc SE 28-3-12, fsh 3045 ft; Hovey 1, SEc SE 21-4-14, fsh 3720 ft. Foster-Reiter's No. 1, SEc SW 9-2-15, sd 3500 ft. Haley, Garber & Pulse's Ellison 1, NWc SE SE 4-1-12, dr 2300 ft. Reiter-Foster's Kugle 1, C NE 10-2-11, rig pulled in 3445 ft. Connell et al's Tensey 1, SEc NW 5-1-19, spd and sd.

Kansas Wildcats

BARBER COUNTY — Skelly et al's Richardson 1, SWc 30-30-14, sd 4625 ft. Vickers Pet. Co. et al's Ott 1, SWc 30-32-14, dr 4375 ft. R. B. Brown's Martin 1, NWc 14-34-11, sd 1500 ft. Shaffer O. & G. Co.'s Alexander 1, C SE 13-33-13, dr 3480 ft.

BARTON COUNTY—Huffin et al's Smith 1, NE SE NE 17-19-10, sd 5100 ft.

COWLEY COUNTY—Branson et al's White 1, SEc SW SW 7-30-6, sd 1560 ft.

KINGMAN COUNTY—Harwood & Winters' Lindholm 1, C NE 22-28-5, sd 4026 ft. Crawford and McKenna's Beshere 1, NEc NW 31-28-5, dr 4295 ft. Marland Oil Co.'s Padgett 1, NEc SW 11-28-6, dr 2540 ft. Fleegar et al's Greeleaf 1, NEc 13-28-7, sd 3930 ft. Cassody Oil Corp.'s Yeoman 1, C SE 35-28-7, pb 4032 ft. Phillips Pet. Co.'s McKenna 1, C NW 16-28-6w, co 4030 ft. Ozark Drilling Co.'s Richards 1, SEc NE SW 4-30-6, sd 5252 ft. Vickers & Stearns' Keimig 1, C NW 35-30-9, dr 3820 ft.

LYON COUNTY—Culp et al's No. 1, SWc SE 25-19-10, sd 220 ft. Gashe & Balliere's Stratton 1, SEc NW 32-20-13, lcn.

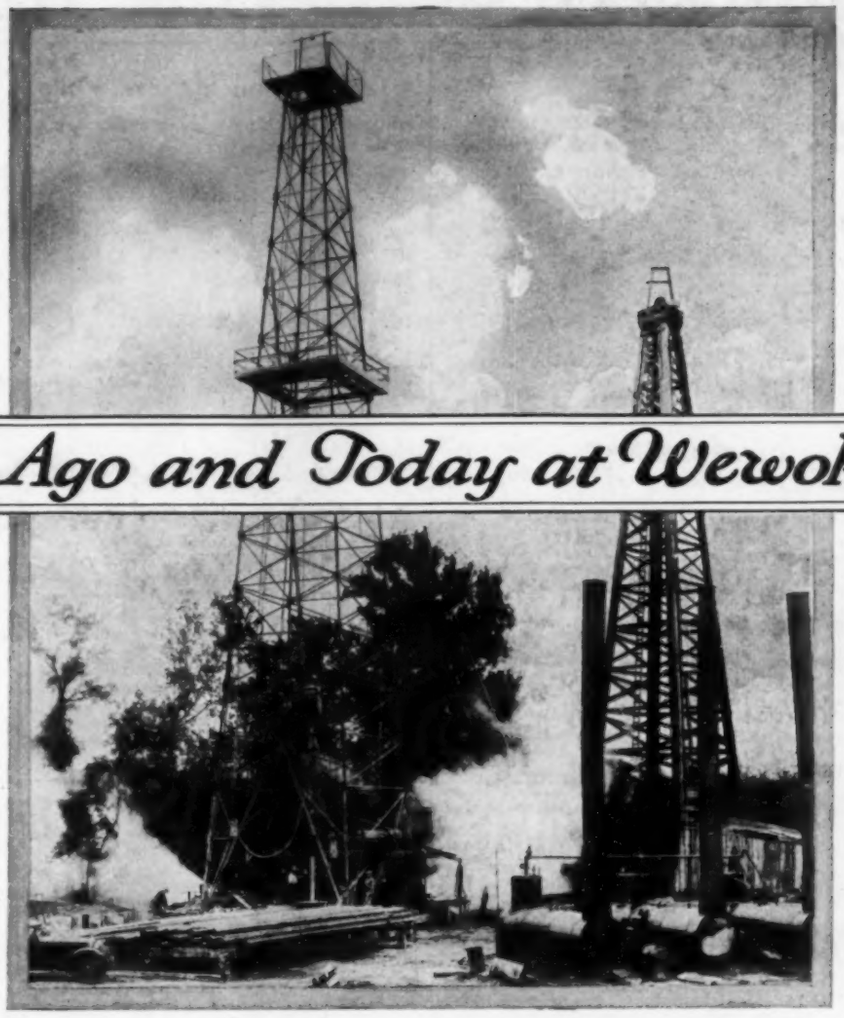
RENO COUNTY—Sheldon et al's Manigson 1, SEc NW 10-23-4, sd 3125 ft. Fleeger et al's Neeley 1, SEc NW 35-23-7, dr 2700 ft. Miss. Valley Oil Co.'s Pexrodd 1, SEc NW 25-23-7, dr 4048 ft. Cassody Oil Co.'s High 1, C SE 9-25-7, td 4012 ft. Frank Hopper's Stevens 1, NWc 7-26-7, cementing 4295 ft.

RUSSELL COUNTY—Keys Pet. Co.'s Sloan 1, C SE SW SE 2-13-15, set cas 2470 ft. Wilcox Russell's Wilson 1, SE SW 14-12-13, dr 2500 ft.

SUMNER COUNTY—Stalling et al's Rice 1, C NE NE NW 3-32-2, sd 3812 ft.

SEWARD COUNTY—Wilson et al's Son 1, C NE NE NE 14-33-33, lost hole 600 ft.

Magnolia Petroleum Co. derricks at Wewoka, Okla.



Three Years Ago and Today at Wewoka

Deeper and Deeper!

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This simple statement is typical of what has been going on in the oil business for the past five or ten years. "Deeper and deeper" has become the battle cry of the drilling industry.

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PERMITS GRANTED FOR NEW WELLS

Weekly Comparison of New Wells

Following is a condensed table giving a comparison of permits or locations made for new wells during the past year in Kansas, Oklahoma, Arkansas, Louisiana, Texas and California:

	Mar. 1926	Apr. 1926	May 1926	June 1926	July 1926	Aug. 1926	Sept. 1926	Oct. 1	Oct. 8	Oct. 15	Oct. 22	Oct. 29
Arkansas	106	124	103	100	107	65	62	6	15	12	10	14
California	116	135	79	69	80	103	106	7	30	34	30	17
Louisiana	145	150	109	107	141	93	113	25	13	24	30	23
Kansas	160	170	156	161	143	119	124	53	31	16	22	26
Oklahoma	419	593	471	411	522	396	398	82	63	88	98	100
Texas	817	1070	941	1168	1468	1073	1021	322	276	207	291	216
Mountain States	...	...	113	124	108	106	101	30	24	8	11	20
Total	1763	2242	1972	2149	2569	1955	1905	525	452	389	492	416

CALIFORNIA

Huntington Beach—Standard Oil Co.'s P. E. 1, 10-6-11; Huntington B-56, 10-6-11. Petroleum Securities Co.'s Turner 1, 10-6-11. Standard Oil Co.'s P. E. 2, 10-6-11; Huntington H-17, 10-6-11; Huntington H-19, 10-6-11. Superior Oil Co.'s Fee 3, 10-6-11; Fee 4, 10-6-11; Levinson 1, 10-6-11. Petroleum Securities Co.'s Plavan 1, 10-6-11.

Los Angeles County—George W. Johnson's Wickham 1, 32-5-17.

Midway—Standard Oil Co.'s No. 6, 3-32-24.

Ojai—A. H. Bradford & W. H. Geis, Trustees' No. 1, 21-4-22.

Piru—W. H. Geis' No. 2, 36-4-18.

Rosecrans—Barnsdall Oil Co.'s Rosecrans 8, 20-3-13.

Seal Beach—Associated Oil Co.'s Bryant 1, 11-5-12.

Summerland—Smith & Barmore's No. 3, 4-26.

MOUNTAIN STATES

WYOMING

Continental Oil Co.'s No. 42, 9-32-76.

COLORADO

Continental Oil Co.'s No. 578, 35-18-70. Dutton-Lightner's No. 1, NW¼ 10-34-11.

MONTANA

Jones Oil Co.'s No. 1, NW¼ 17-34-1w; No. 2, NE¼ 18-34-1w. O'Neill Bros.' No. 8, SE¼ 27-35-2w; No. 10, SE¼ 27-35-2w; No. 1-D, NW¼ 22-34-1w. California Co.'s No. 7, SE¼ 22-35-2w; No. 1, SW¼ 26-35-2w; No. 4, SW¼ 23-35-2w. Wilson Oil Co.'s No. 3, SW¼ 25-35-2w. Ohio Oil Co.'s No. 4, NE¼ 10-35-2w; No. 5, NW¼ 23-35-2e. Carter Oil Co.'s No. 1, SW¼ 7-33-1w; No. 1, NE¼ 17-33-2w; No. 1, NE¼ 27-34-2w. Rice Oil Co.'s No. 18, SW¼ 30-35-1w. Sunburst Oil Co.'s No. 4, SE¼ 14-35-2w. Queen City Oil Co.'s No. 21, NW¼ 4-34-2w.

KANSAS

Cowley County—Independent Oil & Gas Company No. 2 Swenson, southwest corner of the southeast of 15-32-4. Skelly Oil Co., No. 2 Wallace, northwest corner of the southwest of the southwest of the southeast of 15-32-4. T. B. Slick et al No. 1 A. Dibbens, northwest corner of the northwest of the northeast of 22-32-4. Lewis Oil Company et al No. 1 Magnus, northeast corner of the northwest of the southeast of 31-34-7.

Greenwood County—Theta Oil Company No. 18 Browning, northeast corner of the southeast o fthe northwest of 17-22-10. Davis, Hazlett et al No. 10 DeMalorie, southwest corner of the southeast of the southwest of 7-22-11. Simmons et al No. 5 Clopton, northeast corner of the northwest of the northwest of 18-22-11; No. 6 Clopton, northwest corner of the northeast of the northwest of 18-22-11. Phillips Petroleum Company No. 1 Culber, southwest corner of the northeast of 29-22-11; No. 1 Blank, southwest corner of the southeast of 29-22-13. Simmons et al No. 2 Lutki, northeast corner of the southeast of the southwest of 29-22-13; No. 3, Lutki, southwest corner of the southeast of the southwest of 29-22-13. Mid-Continent Pet. Corporation No. 1 Shupbank, northeast corner of the northwest of 32-22-13. Skelly Oil Company No. 1 Lou, northwest corner of the northeast of 32-22-13. Fisher, Lauck et al No. 1 Edwards, northeast corner of the southwest of 7-23-11; No. 2 Edwards, northwest corner of the northeast of the southwest of 7-23-11. Marland Oil Company No. 2 Edwards, southwest corner of the southeast of the northwest of 7-23-11; No. 3 Edwards, northeast corner of the southeast of the northwest of 7-3-11. Phillips Petroleum Company No. 4 Edwards, southwest corner of the northeast of 7-23-11. The Texas Company No. 5 Fogle, northeast corner of the northwest of the northwest of 16-23-11; No. 3 McGilvrey, northwest corner of the southeast of the northeast of 17-23-11. Theta Oil Company No. 3 Rockhill, northeast corner of the northwest of the northwest of 31-24-11. Emerald Oil Company No. 1 Teichgraber, northeast corner of the northwest of the northeast of 10-26-9.

Lyon County—Theta Oil Company No. 7 Jones, southwest corner of the northeast of the northwest of 30-21-10.

Russell County—Keys Petroleum Company No. 1 Day, northwest corner of the northeast of 8-14-15w.

Sumner County—Marland Oil Company No. 1 Hull, northeast corner of 11-35-1e.

OKLAHOMA

Caddo County — English Drilling Company No. 1 Starkweather, old well deepened, southeast corner of the northeast of the southwest of 31-6n-9w.

Carter County—Magnolia Petroleum Company No. 13 J. Lohman, northwest of the southwest of the southeast of 23-2s-3w; No. 2 Ed. and G. Cox, southeast corner of the southwest of the northwest of 15-2s-2w. Humble Oil & Refining Company No. 2 Hale, old well deepened, northeast corner of the southeast of the southeast of 28-1s-3w; No. 1 Hefner, southwest corner of the northeast of the northeast of 16-2s-2w.

Cleveland County—Sooner Oil Company No. 1 Vandeveer, northeast corner of the northwest of the southwest of 15-7n-1w.

Cotton County—J. W. Ray No. 1 Koehler, northwest corner rof the southeast of 22-2s-11w.

Creek County — J. B. Grieves et al No. 2 Grayson, southwest corner of the northwest of the northeast of 24-19-8. Shaffer Oil & Refining Company No. 1 Merritt, southeast corner of the southwest of the northwest of 26-18-7. Devonian & Billingslea No. 1 Frank, southwest corner of the northwest of 28-17-8. Peters Petroleum Company No. 4 Arsoyalle, northwest corner of the southeast of the northeast of 21-16-8. Lima Oil & Gas Company No. 3 Benjamin, southwest corner of 30-15-8. C. G. Tibbens No. 1 Hemmitt, southwest corner of the southeast of 23-14-8. Gypsy Oil Company No. 1 F. Fixico, southeast corner of the northwest of the northeast of 30-14-8. Olean Petroleum Company No. 2 McGilbray, southeast corner of the northeast of the northeast of 30-14-8. Pure Oil Company No. 4 Kernal, northwest corner of the southeast of the northeast of 30-14-8. Radcliff Oil Company No. 1 Unallotted, northeast corner of the southeast of 34-18-10. The Texas Company No. 3 Land, old well deepened, northwest corner of the northeast of the southwest of 1-18-11. Wilcox Oil & Gas Company No. 3 Lindsey, northwest of the southeast of the northeast of 10-17-9. Nowata Oil & Refining Company No. 1 Sims, southeast corner of 6-17-10. Ted Ray Oil Company No. 2 Brink, center of the south line of the southeast of the southwest of 13-17-10. J. H. Wright No. 13 Tahkaney, northeast corner of the northwest of 24-17-10. Pioneer Petroleum Company No. 1 Lewis, northwest corner of 19-17-11. Mid-Continent Petroleum Corporation No. 1 Friday, northwest corner of the southeast of 31-15-9. C. G. Tibbens No. 3 Lucas, northeast corner of the northwest of the northwest of 31-15-9; No. 4 Lucas, southeast corner of the southwest of the northeast of 31-15-9. Mid-Continent Petroleum Corporation No. 7 Walker, southwest corner of the northeast of 32-14-10. T. B. Slick & Furhman No. 1 Harjo, northeast corner of the southeast of the southwest of 32-14-10.

Garfield County—Sinclair Oil & Gas Company No. 7-A Shaffer, old well deepened, southwest corner of the southeast of 18-22-3w; No. 13 Kisner (West), old well deepend, northeast corner of the northwest of 19-22-3w.

Grady County—Oklahoma Natural Gas Company No. 3 Smith, southeast corner of the southwest of the southwest of 26-5n-8w. Noble & Westerfelt No. 4 Smith, southwest corner of the southeast of the southwest of 26-5n-8w. Magnolia Petroleum Company No. 2 Dryden, northwest corner of the southeast of 35-5n-8w. Meridian Gas Company No. 3 Dryden, center of the southwest of the southwest of 2-4n-8w. Gypsy Oil Company No. 1 Kayser, southeast corner of the southwest of the northwest of 16-3n-5w. Clark & Cowden No. 1 Kerans, southeast corner of the southwest of the northeast of 21-3n-5w.

Hughes County—Gypsy Oil Company No. 1 Tiger, northwest corner of the southwest of 5-8-9. Independent Oil & Gas Company No. 2 Long, northwest corner of 14-8-9.

Jefferson County—W. Bassett No. 1 Stephens-Holland, center of the northeast of the northwest of 15-6s-8w.

Kay County—Marland Oil Company No. 1 White, southeast corner of the northwest of 17-29-1e. Ostot et al No. 1 Mitmore, southeast corner of the southwest of 8-27-1w. Blackwell Oil & Gas Company No. 2 Kaney, southwest corner of the northwest of the northwest of 7-26-1w.

Lincoln County—Bu-Vi-Bar Petroleum Company No. 1, School land, center of the northeast of the southeast of 16-13-4. Mid-Continent Petroleum Corporation No. 1 School land, northeast of 16-13-6.

Muskogee County—M. S. Mussellman No. 1 Grimmett, northeast corner of the southwest of the northeast of 16-15-17. Indian Capital Oil & Gas Company No. 1 R. Washington, center of the north line of the southwest of the northwest of 13-14-17.

Noble County—Magnolia Petroleum Company No. 1 Phearson, northwest corner of the southeast of 15-21-2w.

Okfuskee County—E. P. Humphrey No. 1-A Adams, southwest corner of the northeast of 23-11-11.

Okmulgee County—Enfisco Oil Corporation No. 2 Rorscharch, northeast corner of the northwest of 3-15-11. C. L. McMahon No. 2 B. Forty-four, center of the east line of the southwest of the southeast of 9-15-12. Wigton, Long & Mid-Continent Petroleum Corporation No. 2 Milroy, southeast corner of the northeast of 29-13-11. Drew Beams No. 2 J. Colbert, old well deepened, northeast corner of the southeast of 15-14-14. Columbus Drilling Company No. 6, northwest corner of the southeast of the northwest of 28-13-14, old well deepened. F. E. Cuseck et al No. 8 M. Wiley, southeast corner of the northeast of the northeast of 29-13-14.

Osage County—Keener Oil & Gas Company No. 1, northeast cirner of the southeast of the

southeast of 13-29-11. The Texas Company No. 1, southeast corner of the northeast of 3-27-5. Gypsy Oil Company No. 1, southwest corner of the northeast of 7-27-6; No. 2, southeast corner of the southwest of the northeast of 7-27-6. Phillips Petroleum Company No. 13, northwest corner of 7-27-6. Kewanee Oil & Gas Company No. 3, southeast corner of the southwest of the northeast of 34-27-6. Midland Oil Company No. 1, northeast corner of the northwest of the southeast of 12-5-5. Indian Territory Illuminating Oil Company No. 350, northeast corner of the southwest of the southwest of 27-25-8; No. 351, northwest corner of the southwest of 27-25-8. Western Osage & Wrightsman No. 4, southeast corner of the northwest of 31-25-8. Tidal Osage Oil Company No. 4, southeast corner of the northeast of the southeast of 1-23-8; No. 5, northwest corner of the southeast of the southeast of 1-23-8. Peters Petroleum Company No. 12, southeast corner of 12-23-8. Delmar Oil Company No. 1, southwest corner of the southeast of 20-23-10. Kewanee Oil & Gas Company No. 17, northeast corner of the southwest of the northeast of 4-22-11. Mason & Carter No. 8, northeast corner of the northwest of the northwest of the northeast of 23-21-8. Sand Springs Home No. 98, southwest corner of the northeast of the southeast of 24-21-8. Oklahoma Natural Gas Company No. 761, northeast corner of the southwest of the northwest of 20-21-11. Kewanee Oil & Gas Company No. 4, center of the north line of the south half of the northwest of 17-21-13. Sand Springs Home No. 99, southwest corner of the northeast of the southwest of the northwest of 23-20-10.

Pawnee County—Ora Steen et al No. 1-A Clark, southeast corner of the southwest of the southwest of 9-20-7.

Payne County— Olean Petroleum Company No. 1 Moses, northeast corner of the northwest of 21-19-5. Twin State Oil Company No. 2 Garr, northeast corner of 22-19-5, twin. Hale & Cassiday No. 9 Cochran, old well deepened, southwest corner of the southeast of 30-18-5.

Pottawatomie County—Mid Kansas Oil & Gas Company No. 1 Brandenburg, southwest corner of 34-8n-4e.

Pontotoc County—American Oil & Refining Company No. 1 Witherspoon, northeast corner of 17-4n-6e.

Seminole County—Gypsy Oil Company No. 1 Grayson, southeast corner of the northeast of the northeast of 33-10-6. Wilcox Oil & Gas Company No. 9 Bruner, twin, southeast corner of the southwest of 15-10-8. Barnsdall Oil Corporation No. 1 Ingram, southeast corner of the northwest of 1-9-5. Twin State Oil Company No. 1 Jennings, northeast corner of the southwest of the northwest of 4-9-6. Mid-Continent Petroleum Corporation No. 6 Rentie, northeast corner of the southeast of the southeast of 14-9-6. Indian Territory Illuminating Oil Company No. 9 Bowlegs, southwest corner of the northeast of the southeast of 26-9-6. Roxana Petroleum Corporation No. 2 T. E. Powell, northeast corner of the northwest of the northeast of 35-9-6. J. E. Crosby et al No. 1 Sewell, southeast corner of the northeast of the southwest of 15-8-8.

Stephens County—Fossett et al No. 1 Adams, northwest corner of the southwest of 19-1s-8w. Pearce & Brown No. 6 Wilkinson, southeast corner of the northeast of the southeast of 27-1s-8w. Ellis Drilling Company No. 3 Nigh, southeast corner of the southwest of the northwest of 34-1s-8w. Magnolia Petroleum Company No. 1 Parker, northwest corner of the northeast of the southwest of 8-1s-5w. Homaokla Oil Company No. 1 Johnson, southwest corner of the northeast of the northeast of 29-2s-7w.

Tulsa County—Superior Oil Corporation No. 3 McKee, center of the south line of the southwest of the southwest of 6-19-10. Superior & Swift No. 3 Burnett, center of the north line of the northeast of the northwest of 7-19-10. Sand Springs Home No. 1 Davis, center of the north line of the south half of the northeast of the northwest of 1-19-11. Sapulpa Fuel Company No. 1 Unallotted, southwest corner of 32-19-11; No. 2 Unallotted, northwest of the southwest of the southwest of the southwest of 32-19-11. McCarthy et al No. 1 Woodward, northeast of the southwest of the northwest of 15-19-13. W. Atkins et al No. 1 Colbert, northeast corner of the southeast of 35-19-13. Barnsdall Oil Corporation No. 2 Cooper, northwest corner of the southwest of the nrthwest of 3-18-13.

A Small, Portable, Power Unit

You wouldn't think of trying to get along without lifting jacks. Here's another jack you shouldn't be without — one even more useful—a jack that PULLS. This little device works with a ratchet movement and

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with tremendous capacity. Light, compact, and easy to move from place to place on its small truck wheels. Works in close quarters and in any position.

10 to 40 Tons Line Pull Handy-Andy is all steel and made to stand abuse. Saves time and labor on scores of heavy moving and pulling jobs around refineries, in fields and on pipe lines. For pulling pipe and casing, pulling out stalled trucks, shifting and unloading heavy equipment, moving and erecting tanks, moving cars short pulls, etc.

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Comes Ready to Put to Work. Handy-Andy comes complete with cables ready to put to work. Made up with four outfits of cable equipment. Write for literature, prices and name of nearest representative.

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STANDARD RAIL & STEEL COMPANY
Oil Well Supplies

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3-inch Standard Line Pipe	3-inch O. D. Line Pipe
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6-inch Standard Line Pipe	5½-inch O. D. Line Pipe
8-inch Standard Line Pipe	

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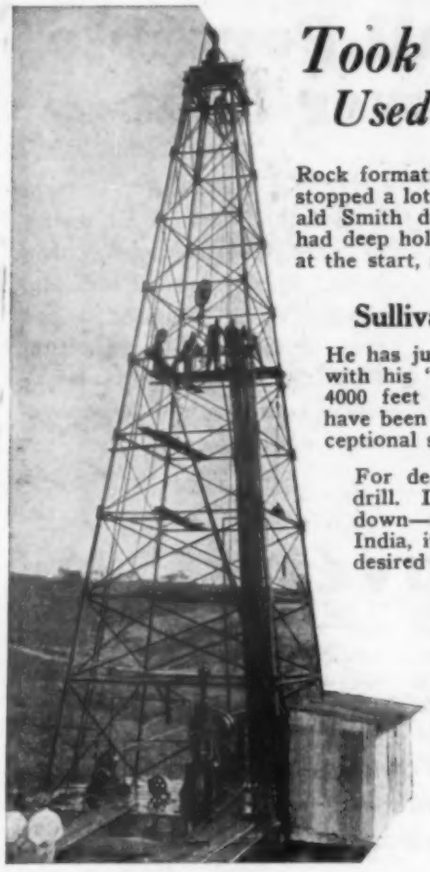

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Sullivan "FK" Diamond Drill

He has just set 2100 feet of 10-inch casing with his "FK" and is now drilling to set 4000 feet of 8¼-inch. Three other holes have been completed and Smith reports exceptional speed on the work.

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PEDEN IRON & STEEL CO.
HOUSTON – SAN ANTONIO – SHREVEPORT

LOUISIANA

Bossier Parish—Gulf Ref. Co. of La., Ardis Bldg., Shreveport, La., C. B. Hodges 18, 19-16n-11w, 1574 ft W and 921 ft S of center of section.

Caddo Parish—Dixie Oil Co., Slattery Bldg., Shreveport, Noel C-1, 15-20n-15w, 1470 ft N and 1455 ft E of SW corner of section. W. P. Ramsey, Oil City, Powell 8, 36-22n-16w, 660 ft S and 330 ft W of NE corner of SE¼ of SW¼; Powell 9, 36-22n-16w, 570 ft S and 570 ft W of NE corner of SE¼ of SW¼; Powell 10, 36-22n-16w, 180 ft W and 270 ft S of NE corner of SW¼ of SW¼; Powell 1, 36-22n-16w, 200 ft S and 630 ft W of NE corner of SW¼ of SW¼. The Texas Co., Ricou-Brewster Bldg., Shreveport, Caddo Levee Board 66, 33-21n-16w, 3590 ft S and 755 ft W of NE corner of section; Caddo Levee Board 67, 33-21n-16w, 1120 ft W and 490 ft S of NE corner of SE¼; Caddo Levee Board 68, 33-21n-16w, 1120 ft S and 1120 ft W of NE corner of SE¼. Thomason & Fitzsimmons, 527 Wichita St., Shreveport, Muslow Oil Co. 5, 31-21n-15w, 196 ft S and 320 ft E of NW corner NE¼ of SE¼. Wenzel & Taggart, 421 Ardis Bldg., Shreveport, Hunsicker 4, 15-20n-15w, 660 ft N and 200 ft W of SE corner of NE¼ of SE¼; Hunsicker 5, 15-20n-15w, 200 ft N and 200 ft W of SE corner of NE¼ of SE¼.

Calcasieu Parish—The Texas Co., Shreveport, J. G. Gray 27, 33-10s-12w, 690 ft W and 618 ft N of SE corner of section.

De Soto Parish—Avalon Oil Co. et al, 212 Levy Bldg., Shreveport, Billingsley 1, 12-11n-16w, 300 ft S and 300 ft W of NE corner of NW¼ of SW¼. M. L. Snapp et al, 1208 City Bank Bldg., Shreveport, Lanier Oil & Land Co. 1, 7-11n-11w, 330 ft N and 330 ft W of center of section.

East Carroll Parish—T. A. Snell, 53 American Natl Bank Bldg., Shreveport, Robt. Nicholson 1, 2-20n-12e, 660 ft S of NE corner of section.

La Salle Parish—Geo. W. Wetherbee, P. O. Box 512, Shreveport, Urania Lbr. Co. A-6, 2-9n-1e, 192 ft W and 180 ft S of NE corner of SE¼ of SW¼. Whitaker & Winer, Tullos, Hardtner 1, 26-10n-1e, 400 ft N and 70 ft W of SE corner of SW¼ of SE¼.

Natchitoches Parish—Weaver Brothers, Commercial Bank Bldg., Shreveport, Fee 2, Section 14 in Section 40, Twp. 7n, Range 7w, 200 ft N and 200 ft W of SE corner of NW¼ of SW¼.

Ouachita Parish—United Oil & Natl. Gas Products Corp., Monroe, Guthrie 2, Twp. 20n, Rge. 4e, 4613 ft N and 6830 ft W of corner of sections 26, 49, 25.

Terrebonne Parish — Terrebonne Gas Co., Houma, Chiasson 1, 50-19s-19e, N 71 degrees 48 minutes E, 27.38 chains from NW corner of Lot 1 in Section 50.

Webster Parish—Humble Oil & Ref. Co., Houston, Texas, Mrs. M. F. Davis 5, 23-21n-10w, 990 ft S and 1980 ft E of NW corner of section.

Winn Parish—Louisiana Petroleum Corp., 208 Ricou-Brewster Bldg., Shreveport, La. Central 1, 16-13n-1w, 200 ft S and 200 ft E of NW corner of NE¼ of SW¼.

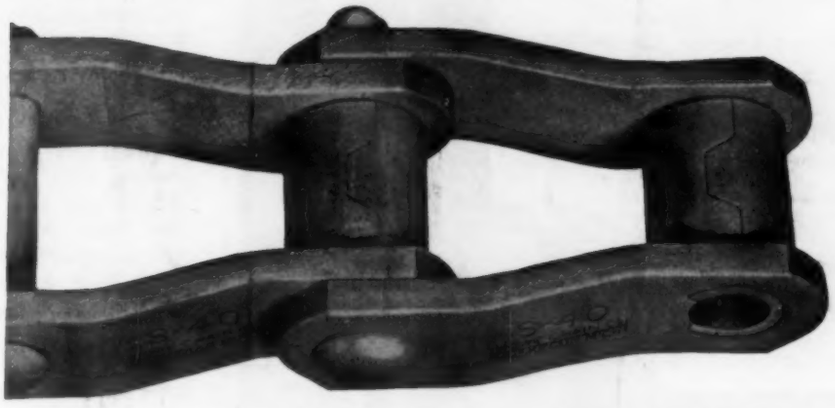
ARKANSAS

Columbia County—Crosby et al's Womack 5, 1-16-20, SEc NW¼ SE¼.

Nevada County—Advance Oil Co.'s McKinney 1, 9-14-21, 150 ft S and W of NEc SW¼ SE¼.

Ouachita County—Keever et al's Hicks 2, 27-15-16, NEc NW¼ SE¼. Little Fay Oil Co.'s Robertson 3, 25-15-16, NWc SW¼ NW¼. Phillips Pet. Co.'s Farrish 7, 34-15-15, SWc SW¼ SE¼. Simms Oil Co.'s J. E. Murphy 6, 28-15-15, 200 ft S and E of NWc NW¼ SW¼. Woodley Pet. Co.'s Berg 3, 32-15-15, SEc SW¼ NE¼. Imperial O. & G. Co.'s Ramsey A-1, 21-17-16, NEc SW¼ SW¼. E. M. Jones' Murphy 9, 17-16-15, 450 ft S and 178 ft W of NEc NW¼ NE¼. Keen & Woolf's Murphy 5, 9-16-15, 150 ft S and E of NWc E½ SE¼ NW¼. Lion O. & R. Co.'s Lawton A-8, 10-16-15, NWc SE¼ NW¼. Ohio Oil Co.'s Stock 5, 21-17-16, SEc NW¼ SW¼. C. L. Saxon's Fee 3, 4-16-16, SWc NW¼ SW¼. Sure Oil Corp.'s Flenniken 8, 5-16-15, 560 ft N and 1320 ft E of SWc of section.

HOWE CHAIN



S-40 Steel Roller Drive Chain. Pitch 3.075 in. Average Ultimate Strength, 28,000 pounds

When you see S-40 on a chain, and below it the name Howe Chain Company, Muskegon, you are looking at a chain that is ruggedly designed and built to withstand the punishment that goes with the hardest kind of drilling jobs.

High speeds, deep holes, tough drilling hours on end—that's what the Howe S-40 Chain is made for.

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OKLAHOMA TEXAS ARKANSAS LOUISIANA

To be as good a water can as the
GOTT WATER CAN
another would have to be made just like the Gott and no other water can is—not one.
Order through your supply dealer
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Viking Twin Oil Pumping Units

Figure—15

FOR UNLOADING AND TRANSFER SERVICE

No. 2 Twin Outfit complete with 3 H. P. Gasoline Engine.

Capacity each pump 90 Gallons per minute.

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850 Subway Terminal Building, Los Angeles, California

Move Offices

Tulsa, Okla.—The National Petroleum Engineering Company, a partnership composed of H. A. Campbell, formerly assistant chief of the oil and gas section, and F. Lee Stewart, an engineer of long experience in the Mid-Continent oil fields, has been moved from the 10th floor of the Atlas Life Building to the sixth floor, and now occupy suite 604.

This company was organized in September, 1925, by Mr. Campbell and Mr. Stewart and the late D. D. Finley. Mr. Finley was killed in an automobile accident while enroute to Texas in June of this year. After his death Mr. Campbell and Mr. Stewart took over the company and are now engaged in engineering reports of all kinds pertaining to the oil and gas industry.

Shallow Show in Utah

Salt Lake City, Utah.—The Utah Oil Development Company has encountered a second showing of live oil in its test of the Moab sthucture, section 8-26-22. Drilling was suspended at 1050 feet to land the 10-inch casing. After drilling was resumed a small quantity of light oil was found at 1063 feet. Some of the leading geologists in the Rocky Mountain region worked on the location. Oil is expected at 1175 feet, according to geologists on the ground.

Show in New Mexico

Santa Fe, N. M.—The Union Oil & Mining Company, San Juan County operators, recently found considerable oil standing in its test after a forced shut down. There was more than 1000 feet of fluid in the hole. A test showed the crude to be of a lower grade than that found in many parts of the state. The well probably is not a commercial one in its present state.

TEXAS

Archer County — The Magnolia Prod. Co., Dallas, M. Rutty 8B, J. O. Riley sur, 150 ft to S and E lines; L. L. Hudson 6, S 80, Club Ranch sur, 300 ft SW of No. 4; A. J. Lowe 26, I. Holman sur, B 2, 300 ft N of No. 25. Simms Oil Co., Dallas, Burleson-Turbeville 2, B 142, R. Carson sur, 300 ft E of No. 1, L. F. Wilson 22, H&TC sur No. 2, 300 ft N of No. 21. Sun Oil Co., Dallas, F. C. Green 1, J. Levinsr su, 450 ft to S and 1700 ft to E line.

Atascosa County—Witherspoon Oil Co., San Antonio, H. English 1, sur 174, 150 ft to N and center of line.

Brown County — Amerada Pet. Corp., Box 104, Cisco, J. H. Fry 4, G. Stubblefield sur, 300 ft W of No. 5; 5, same sur, 450 ft to W and 150 ft to S line; 6, same sur, 450 ft to S and 150 ft to W line; 7, same sur, 300 ft S of No. 3; 8, same sur, 300 ft N of No. 2. The Texas Co., Fort Worth, W. N. Pugh 2, J. C. Pugh sur, 300 ft S of No. 1; L. V. Edington 8, R. G. Milliken sur, 400 ft of No. 7.

Estate of R. G. Gillespie, Park Bldg., Pittsburgh, Pa., J. P. Newton 12, S 145, W. Swain sur; E. D. Henson 15, G. Logan sur. States Oil Corp., Eastland, D. C. Woodridge 16, S 157, ET Ry 313 ft W of No. 15. J. M. Huber Co., of La., Inc., Breckenridge, J. Byrd 5, W. B. Travis sur No. 148, 150 ft to W and 500 ft to S line. Phillips Pet. Co. Bartlesville, Okla., R. Hickman 1, T. Benson No. 783 sur, 150 ft to S and E lines. Sinclair Oil Co., Fort Worth, L. J. Shore 2, S 635, J. C. Ryan sur, 300 ft W of No. 1. Shuler-Davies Co., Brownwood, Byrd 9, J. C. Gage sur, 300 ft W of well and most S well. T. B. Slick, Cross Plains, C. C. Starr 4, A. White sur, 2010 ft to S and 4065 ft to E line. J. H. Davis, Brownwood, M. E. Hale 1, C. Cummings sur 607, 477 ft to E and S lines. Kone Prod., Cisco, J. I. Foster 11, T. Benson sur, 450 ft to N and 150 ft to W line.

Bexar County — Associated Prod. Co., Fort Worth, R. W. Caruthers 6, W. Caruthers sur, 150 ft to N and W lines.

Callahan County—Amerada Pet. Corp., Box 1004, Cisco, M. L. Long 6, W. G. Anderson sur, 300 ft E of No. 5. J. F. Morrisey & Rowan, F & M, Fort Worth, J. F. Jones 1, NW¼ GC&SF sur No. 4, 300 ft S of Miller Bros. well. Geo. R. McManis, Box 444, Breckenridge, J. C. Dyer C1, S 2989, TE&L sur, 150 ft to W and 450 ft to S line. M. C. Dev. Co., Box 84, Putnam, H. Wagley 1, S 2999, TE&L sur, 150 ft to W and N lines. Culberson & Dalton, Box 715, Moran, S. S. Diller 4, S 48, LAL sur, 150 ft to W and 450 ft to N line. Mrs. J. A. Witte, Cisco, W. M. Eisenhower 1A, S 40, TE&L sur, 150 ft to S and W lines. Mallory & Ellis, Baird, J. W. Tatum 1, F. Cook sur, 150 ft to N and W lines.

Cooke County—C. C. Lanier, Dallas, A. Hyman 5, T. J. Moss sur, 300 ft S of No. 3; 4, same sur, 300 ft N of No. 3; 3, same sur, 125 ft to W and 820 ft to N line; 7, same sur, 150 ft to N and 30 ft to E line. McElreath, & Suggett, Harvey-Snider Bldg., Wichita Falls, J. G. Biffle 1, R. Shannon sur, 150 ft to N and 660 ft to W line; J. W. Mount 1, SP Ry sur No. 9, 150 ft to S and 1556 ft to W line. Sun Oil Co., Dallas, A. Hyman 2, T. J. Moss sur; 3, same sur; 4, same sur. W. J. Green, Wichita Falls, P. L. McCollum 1, Cromwell & Hawley sur, 150 ft to S and W line. S. F. Gist, Dallas, W. A. Harris 1, J. Harris sur, 150 ft to S and W lines. Lynch, Stahl & Burress, Ardmore, Okla., J. Dangelmayr 4, G. Ivy sur, B 17, 271 ft E of No. 3.

Coleman County—Archie Shaw, Burkett, W. T. Burns 19, A. Wickson sur, 1650 ft to N and 1950 ft to E line. French & Lewis, Cisco, Shannon 1, S 45, T&HO sur, 1400 ft to E and S lines. Schermerhorn Oil Co., 408 Cosden Bldg., Tulsa, Okla., G. M. Gray 1, B 176, M. Izod sur, 1206 ft to E and 1020 ft to S line. Schimmel Prod. Co., Fort Worth, M. P. Richardson 1, B 369, 1000 ft to N and W lines.

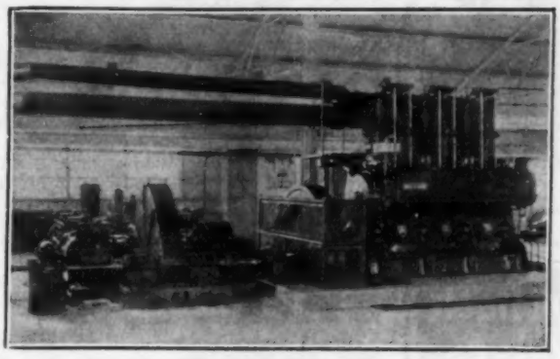
Caldwell County—Magnolia Pet. Co., Dallas, M. Mercer 1, J. Henry sur, 150 ft to NE and SE lines; T. C. Gideon 11, J. Henry sur, 150 ft to NW and SW line; E. Hardeman 12, same sur, 300 ft NE of No. 1; C. Malone 2, same sur, 150 ft to SE and 300 ft NE of No. 3; 3, same sur, 150 ft to SW and SE lines; R. Rios 3, same sur, 150 ft to NE and NW lines.

Crane County—Prairie Oil & Gas Co., Ranger, Univ. B1, S 36, B 31, Univ. Ld. sur, 330 ft to SW and SE line; Univ. A3, B 30, same sur, 660 ft SW of No. 1. Marland Oil Co. of Texas, Fort Worth, Cowden Bros. 2A, S 81, B X, CCSD&RGNG sur, 330 ft to N and E lines. Ben D. Simon, Waggoner Bldg., Fort Worth, Brookfield Co. 1, S 23, B 6, H&TC sur, center of sec. Magnolia Pet. Co., Dallas, O'Keefe-Univ. 3, S 38, B 30, Univ. Ld. sur, 660 ft to E of No. 1.

Carson County — Roxana Pet. Corp., Box 1167, Tulsa, Okla., E. F. Bryan C1, S107, B 4, I&GN sur, 330 ft N and E of SW cor of SE¼; 3, S 92, B 4, I&GN sur, 330 ft to E and S lines; B1, S 92, B 4, I&GN sur, 330 ft to W and S lines. The Texas Co., Wichita Falls, T. J. Boney 1, S 91, B 4, I&GN sur, 330 ft to W and S lines; 2, same sur, 330 ft to N and E lines.

Clay County — C. U. Daniels, 503 Perkins Snider, A. D. Cozart 1, B 3279, TE&L sur,

De La Vergne



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De La Vergne Solid Injection Diesel Engine

No Air Compressor

Simplest 4 cycle Engine Built

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921 East 138th St., New York, N. Y.
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Man who has had practical experience selling oil well supplies and pipe. Good position for right man. State experience.

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Save Time on Back Pressure Valves

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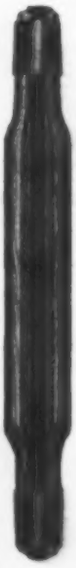

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Save Oil

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Mexia, Texas

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Jack Dodson, Sales Agt., Long Beach, California, Gen. Del.

150 ft to E and S lines. Lone Star Gas Co., Dallas, E. L. Holloway 24, PCSL sur, B 29, 420 ft to N and 1708 ft to W line.

Chambers County — Dunbar & Bohlman Synd., Pittsfield, Mass., G. W. Collier 1, W. Bloodgood sur, SE cor and S of Road.

Concho County—Schimmel Prod. Co., Fort Worth, S. Waring 1, B 2036, 600 ft S of Signal Co, well.

Eastland County — Snowden & McSweeney Co., Fort Worth, G. N. Collins 1, DL&C Co. sur, 400 ft W and 200 ft N of NE cor. Pettit-Adkisson, Magnolia Bldg., Dallas, Harrell 1, S 6, B 6, ET Ry sur, 150 ft to N and 1100 ft to W line.

Gray County—H. F. Wilcox Oil & Gas Co., Tulsa, Okla., Wilcox & Worley 15, S 61, B 3, I&GN sur, 330 ft to N and W lines; 16, sur 330 ft to N and E lines; 17, same sur, 330 ft to W and S line.. 18, same sur, 330 ft to N and W lines.

Gonzales County—Joseph Bruner, Box 174, Waelder, F. W. Crozier 2, F. Deister sur, 304 ft to S and 1051 ft to W line.

Haskell County — Moody Corp., Waggoner Bldg., Fort Worth, Reynolds C. Co. 1, J. Fenner sur, 1790 ft to to N and 250 ft to W line.

Hutchinson County—Phillips Pet. Co., Bartlesville, Okla., Whittenburg 3, S 62, B 46, H&TC sur, 328 ft to S and 1327 ft to E line; A. Ruben 2, S 67, B 26, H&TC sur, 250 ft to E and 330 ft to N line; 1, same sur, 290 ft to N and 330 ft to W line; S. Capers 8, S 12, B Y, M&C sur, 330 ft to S and E lines; W. Crusoe 3, S 69, B 46, H&TC sur, 330 ft to E and N lines; 2, same sur, 330 ft to N and W lines; W lines; J. J. Gordon 8, S 21, B Y, A & B sur, 330 ft to W and S lines; J. Florence 2, E½ Tract 1, B 46, M. Whitley sur, 330 ft to N and 990 ft to E line; P. W. Easter 4, S 69, B 46, H&TC sur, 1661 ft to N and 312 ft to W line; G. E. Martin 10, S 1, B XO2, H&OB sur, 330 ft to N and 995 ft to E line; 9, same sur, 995 ft to E and 990 ft to N line; 8, same sur, 910 ft to E and 1012 ft to S line; T. Elva 10, E. Tomlinson sur No. 3, 307 ft S of 432 ft W of SE cor; 9, same sur, 300 ft S and 330 ft E of SW cor; 11, same sur, 330 ft to W and 311 ft to N line; B. Dare 1, D. Blaker sur, S 4, B V, 330 ft E and 311 ft S of SW cor sec. Prairie Oil & Gas Co., Borger, Johnson 35, S 22, BY, M&C sur, 330 ft to N and 142 ft to W line. Canadian River Oil Co., Amarillo, E. B. Johnson 1, S 22, B Y, A&B sur, 165 ft to N and W lines. Grimes Bros. & Jones, Buchanan St., Amarillo, Johnson Bros. 1, S 22, B Y, H&TC sur, 330 ft to N and 154 ft to E line.

Harris County—Gulf Prod. Co., Houston, W. H. Jones 3, J. A. Williams sur, 250 ft S along W lines from NW cor; 2, same sur, 200 ft E along N line from NW cor; 2, lots 22, 24, 200 ft to W and on line between; 3, lots 10, 12, 237 ft to W and on line between.

Howard County—Magnolia Pet. Co., Dallas, O. Chalk 5, S 113, B 29, W&NW sur, 660 ft N of No. 1; H. Chalk 1, S 95, B 29, same sur, 330 ft to S and W lines. Marland Oil Co. of Texas, W. T. Waggoner Bldg., Fort Worth, O. Chalk 5, S 113, B 29, W&NW sur, 330 ft to N and 990 ft to W line.

Hardin County—Lake View Oil Co., Sour Lake, Hardin Co. 52, S. Jackson sur, 200 ft to W and S line. Gulf Prod. Co., Houston, M. J. Elberts 1, S. Jackson sur, 50 ft N and W of SE cor lot 74.

Jim Hogg County—The Texas Co., Houston, J. Weil 1, lot 2, sur 81, 150 ft to S and W lines; 2, lot 1, same sur, 150 ft to S and E lines. D. C. Smith, Randado, Well Bros. 1, S 83, B 1, 450 ft to N and 150 ft to W lines. E. L. Smith Oil Co., Mexia, C. Palacios 13, Hendrix surr, 316 ft N of No. 12. Magnolia Pet. Co., Dallas, B. DeLa Garza 14, sur 291, 300 ft E of No. 12.

Jones County—Phillips Pet. Co., Bartlesville, Okla., J. Winters 2, S 19, B 19, T&P sur, 330 ft to W and 990 ft to S line. World Oil Co., Fort Worth, A. W. Clark 1, S 15, B 19, T&P sur, 330 ft t E and S lines. Hartt & Cle, Fidelity Union Bldg., Dallas, W. R. Cranston 1, S 10, B 17, T&P sur, 150 ft t E and 1591 ft t S line. Victr H. Martin, Winfield, Kan., J. O. Culbertson 1, S 6, GH&H sur, cen, SW¼ sec 6.

Jack County—J. K. Hughes Dev. Co., Mexia, J. E. Shaw 1, M. Shield sur, 150 ft to N and W lines. Seaboard Oil & Gas Co. of Texas, Wichita Falls, E. Riley 1, J. J. Stephens sur, 598 ft to N and 660 ft to W line.

Liberty County — Humble Oil & Ref. Co., Houston, J. C. Baldwin 2, W. Duncan sur, 700 ft W of No. 1. Republic Prod. Co., Main St., Houston, Dolbear 142, J. DeVore sur, 1852 ft to E and 3859 ft to N line.

Limestone County—Trans Oil Co., Mexia, A. E. Rosson 16A, B 16, P. Varela sur, 340 ft NW of 7A.

Montague County — Continental Oil Co. of Texas, Wichita Falls, E. J. Bouldin A7, J. Chambliss sur, 342 ft W of No. 6; J. W. Rowland C2, T. Votaus sur, 150 ft to E and 450 ft to S line; B 4, same sur, 150 ft to W and 825 ft to S line; Jones 5, W. Donoho sur, 150 ft to W and 765 ft to S line; Rowland 105, B 5, E. Votaus sur, 150 ft to E and 472 ft to S line; Howard A12, J. Chambliss sur, 150 ft to W and 1050 ft to N line; Rowland 18, same sur, 150 ft to W and 205 ft to N line; 17, same sur, 205 ft to N and 1159 ft to E iine. The Texas Co., Wichita Falls, I. A. Gist 26, W. Donoho sur, 450 ft W of No. 21; M. F. Howard 1, J. Chambliss sur, 150 ft to W and S lines. Pure Oil Co., Mexia, J. W. Maddox 3, J. Cambliss sur, 200 ft to S and E lines. A. P. Nicholson & W. J. Fraley, Insuarnce Bldg., Dallas, W. A. Barclay 1, B. Bell sur, 400 ft to NE and 150 ft to SE line. Pure Oil Co., Mexia, J. W. Rowland 5, E. Votaw sur, 375 ft N of No. 3. Gulf Prod. Co., Fort Worth, J. W. Aowland 2, E. Votaw sur, 150 ft to E and S lines.

Milam County—Union Prod. Co., Rockdale, A. Strelsky 14, Chambers sur, 319 ft NE of No. 4. Jennings Oil Co., Yoakum, H. A. Branch 19, T. J. Chambers sur, 760 ft to NE and NE of No. 12; Horton 3, T. S. Arnett sur, 205 ft E of No. 2.

Medina County—Witherspoon Oil Co., San Antonio, M. Adams 2, E. C. Durst sur, 150 ft to S and W lines.

Mitchell County — J. C. Yancey, 515 West 10th St., Fort Worth, W. F. Sanders 1, S 25, B 25, T&P sur, 400 ft to S and W lines.

Navarro County — Reiter Foster Oil Corp., Mexia, G. W. Ross 1, J. McGee sur, 750 ft to SE and 150 ft to SW line.

Panola County—Goldenrod Co., Wilson Bldg., Dallas, R. Johnson 4, C. D. Bradberry sur, 470 ft to W and 300 ft to N line; 5, same sur, 150 ft to N and 300 ft to W line.

Palo Pinto County—Scott & Thomson, Fort Worth, Prazos T. Site 1, S 38, B A, T&P sur, NC part of sec.

Refugio County—Houston Oil Co. of Texas, Houston, F. B. Rooke 8, T. Mullen Grant sur, 533 ft N 83 degrees 30 ft E.

Roberts County—Ruby Oil Co., Fuqua Bldg., Amarillo, B. F. Tallery 1, S 114, B 2, H&GN sur, 321 ft to W and 320 ft to S line.

Shackelford County — Roeser & Pendleton, Fort Worth, W. I. Cook B12, S 60, ET Ry sur, 433 ft to W and 506 ft to N line; B13, same sur, 433 ft to W and 862 ft to N line; B14, same sur, 150 ft to S and 299 ft to E line; A3, same sur, 150 ft to S and E lines; A4, same sur, 150 ft to W and 502 ft to S line; A 5, same sur, 150 ft to S and W lines; A6, 150 ft to S and E lines; A7, same sur, 150 ft to S and 750 ft to W line; A8, same sur, 150 ft to S and 450 ft to W line; A9, same sur, 150 ft to S and W lines; B2, B 61, same sur, 150 ft to S and 814 ft to W line; A36, S 84, same sur, 450 ft to S and E lines; A38, same sur, 450 ft to N and 150 ft to W lines; A34, 150 ft toN W and N lines; A33, same sur, 150 ft to E and N lines; A1, S 139, ET Ry sur, center of NE¼ of SE¼. Sedwick Oil Co., Box 436, Moran, J. S. Dennis 14, S 15, Lun. Asy. sur, 300 ft S of No. 13. Hughes & Simon, Waggoner Bldg., Fort Worth, P. S. Kendrick 1, Blind Asy. Land sur, S 19, 150 ft to N and W lines. W. S. Duty, 602 Alexander Bldg., Abilene, W. McLemore 1, S 2, HT&B sur, 150 ft to N and 750 ft to W line. L. B. Tannehill, Albany, R. J. Moberly 4, S 59, ET Ry sur, 300 ft S of No. 2. The Texas Co., Fort Worth, W. H. Osborne 8, S 30, Univ. Ld. sur, 645 ft to N and 674 ft to E line. World Oil Co., Fort Worth, L. H. Hall 1, S 2, Lun. Asy. Ld. sur, 1980 ft to N and 1170 ft to E line.

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R. E. Forrester, Moran, P. L. Chaney 1, S 41, Univ. Ld. sur, 150 ft to S and E lines. Humble Oil & Ref. Co., Box 400, Cisco, W. I. Cook 16, S 84, ET Ry sur, 300 ft W of No. 13. Milham Corp. of Texas, San Antonio, Z. W. Casey 20, S 581, TE&L sur, 300 ft SW of No. 17.

Stephens County—Mid-Tex Pet. Co., Eliasville, H. L. Morrison 2, S 1209, TE&L sur, 550 ft N No. 1. Phillips Pet. Co., Bartlesville, Okla., L. Taylor 1, S 9, B 6, T&P sur, SW cor. Milham Corp of Texas, San Antonio, G. W. Thorpe 1, sur 456, 660 ft to N and W lines.

Throckmorton County—Continental Oil Co. of Texas, Wichita Falls, W. H. Portwood 1, B 1277, TE&L sur, 500 ft to W and 1000 ft to N line.

Upton County — Roxana Pet. Corp., McCamey, B. H. Estep 4, S 18, B 3, MK&T sur, 960 ft to E and 330 ft to S line; 5, same sur, 990 ft to E and S lines. Dixie Oil Co., Inc., Shreveport, La., E. S. Hughes 8, S 4, W. Teer sur, 330 ft to E and diagonal boundaries; 9, same sur, 620 ft NW of No. 8; 10, same sur, 660 ft N of No. 8. Republic Prod. Co., Rust Bldg., San Angelo, M. L. Baker 5, S 8, B R, E. E. Grooms sur, 250 ft to NW and 1764 ft to NE line. Texas Oil & Land Co., Big Lake, M. Shirk 1, S 35, B 1, MK&T sur, 546 ft NW of Wentz No. 1 in SE cor. Pure Oil Co., Mexia, H. H. Shirk 1, S 17, B 3, MK&T sur, 330 ft to S and 300 ft to S line.

Val Verde County—O. O. Owens, Box 1403, Tulsa, Okla., J. Y. Mills 1, S 128, I&GN sur, E part of lot 128.

Wichita County—Magnolia Pet. Co., Dallas, C. Honaker 15, SW cor R. Mead sur, 200 ft N of No. 14; S. E. Honaker 73, same sur, 500 ft SW of No. 72. Gulf Prod. Co., Fort Worth, H. S. Griffiin 3, W. H. Spillers sur, 50 ft N to River 300 ft N of Pan. No. 1; 2, B 6, same sur, 300 ft SW of No. 1. Ascot Co., Wichita Falls, J. E. Roller 1, H. G. Horn sur, B2, 150 ft to N and E lines. Grayce Oil Co., Brown Bldg., Wichita Falls, J. B. Evans 10, J. B. Evans sur, 562 ft to W and E lines. J. H. S. Bonner et al, Staley Bldg., Wichita Falls, Cole 12, J. McCool sur, 300 ft W of No. 9. Baldwin & Griswold, Box 1236, Electra, Cogle 1, B 14, W. Todd sur, 15 ft to N and W lines. L. V. Hull, Trustee, Wichita Falls, G. Jennings 13, S 12, B 14, H&TC sur, 150 ft to S and 1093 ft to W lines. Pois & Fine, Staley Bldg., Wichita Falls, Waggoner 1, S 5, B 7, H&TC sur, 150 ft W and N of center. Hereford Oil Co., Electra, Allingham 5B, S 32, B 5, H&TC sur, 150 ft to N and 355 ft to W line. M. T. McClure et al, Wichita Falls, A. I. Ramsdell 1, lot 42, B 12, GC&SF sur, Ward and Todd sur. G. R. Ridgeway, Perkins Snider Bldg., Wichita Falls, Foster-Allen 1, SA&MG sur, 150 ft to N and 450 ft to W line. Culbetson Co., Wichita Falls, J. & J. Waggoner 45, S13, BS&F sur, 150 ft to E and 1086 ft to N line. J. G. Rowe, Wichita Falls, C. W. Carey 1, B 9, lot 7, W&T sur, 10 ft N and E lines. Harry Jaffe, Wichita Falls, T. F. Mitchell 12, P. Castleman sur, 450 ft to S and 150 ft to E line. Bridwell & Heydrick Oil Co., Wichita Falls, Bridwell & Heydrick 2, Ward & T. subdivision, GC&SF sur, B 14, 150 ft to W and 20 ft to N line. Ryan Cons. Pet. Corp., Bartlesville, Okla., C. Nance 87, S. O. Fowler sur, 1530 ft to W and 2600 ft to N line.

Webb County—Cole Pet. Co., Laredo, Callaghan 28, 450 ft to NE and SE lines; S. Marie De Las 27, S 13, B 15, 450 ft to NW and 1050 ft to NE line. Murchison & Fain Oil Co., San Antonio, E. Garcia 4, B 58, J. M. Littig sur, 1639 ft to W and 450 ft to N line. Sun Oil Co., Dallas, A. M. Bruni 8, Bruni subdivision, L. A. Grant sur, 400 ft E of No. 6. W. F. Morgan, Sames Moore Bldg., Laredo, Webster 2, S 684, same sur, 150 ft to E and S lines.

Wilbarger County—Waggoner Ref. Co., Inc., Electra, Waggoner 2, S 47, B 4, H&TC sur, 300 ft N of No. 1; 3, same sur, 300 ft N of No. 2; 4, same sur, 300 ft N of No. 3. Magnolia Pet. Co., Dallas, H&TC 75, S 15, B 13, H&TC sur, 500 ft S of No. 71.

Wharton County—The Texas Co., Houston, S. T. Taylor 11A, S. F. Austin sur, 450 ft to SE of No. 10. Vaccum Oil Co., Houston, W. Owens 1, S. F. Austin sur, 50 ft to NE and SE lines.

Wheeler County—Smith & Foreman & Smith, Box 549, Amarillo, J. Johnson 1, S 88, B A, H&GN sur, 2280 ft to E and S lines.

Young County—Wo-Mac Oil Co., Wichita Falls, G. Stewart 7, D. Dawson sur, 300 ft N of No. 3. Peery-Moran & Woody, Wichita Falls, G. Stewart 2, D. Darwson sur. Robert Oil Corp., Breckenridge, G. P. Stewart 10, D. Dawson sur, 300 ft NE of No. 9. Navarro Oil Co., Houston, E. J. Dunagan 2, S 157, TE&L sur, 150 ft to N and E lines.

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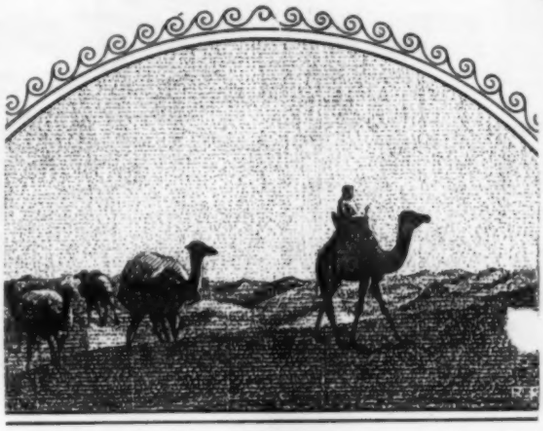

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End view of Gardner Pump

Divided Cylinder Feature Of Gardner Pump

In the new Gardner divided cylinder booster pump for slush and oil line service, the divided pattern fluid end is said to be an unusual development in pump construction, especially for the severe service required of oil field pumps.

In this pump the cylinders are separate castings which are bound together by means of the combined cylinder foot and suction manifold at the bottom and discharge manifold at the top. All fluid passages and ports are direct and liberal, and provide a direct passage for the fluid to enter and leave the cylinder.

Both suction and discharge valves are of the improved 45-degree beveled design. They are guided both top and bottom outside of the valve seat. This construction insures a free and unrestricted flow of the fluid through the valve seat.

Both steam and power pumps are offered in this new design in 12 and 14-inch stroke sizes and for 1000 to 1500 pounds pressure. Steam pumps are equipped with semi-balanced slide valves. Power driven pumps have power end of the totally enclosed flood lubricated design.

Further information will be supplied by the Gardner Governor Company, Quincy, Illinois.

A. P. I. Specifications For New Handbook

Dallas, Texas. — The division of Standardization, American Petroleum Institute, 1508 Kirby Building, announces the following specifications for the new A. P. I. Handbook. Copies of the specifications may be had from the Dallas office, on request.

A. P. I. Standards No. 1, Second Edition, "A. P. I. Belting Specifications" (Tentative).

A. P. I. Standards No. 2, First Edition, "A. P. I. Specifications for Oil Field Boilers (Locomotive Type)."

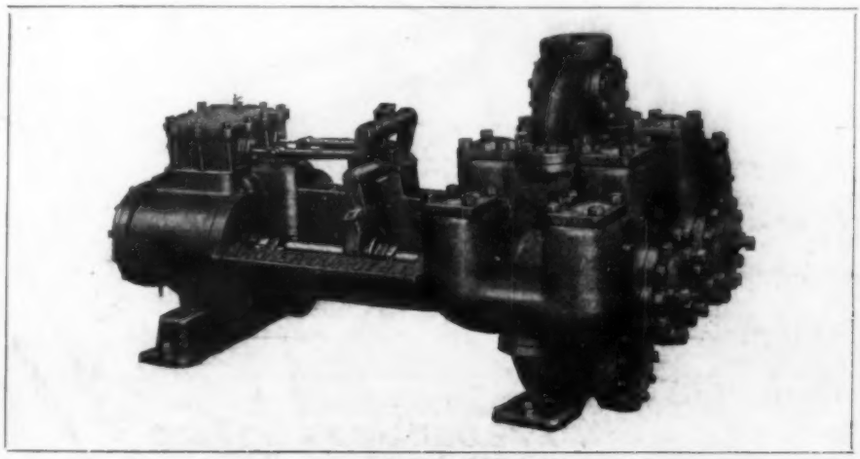
A. P. I. Standards No. 3, Second Edition, "A. P. I. Dimensional Standards for Cable Drilling Tool Joints."

A. P. I. Standards No. 5-A, Second Edition, "A. P. I. Pipe Specification," including tables on casing, drill pipe and tubing.

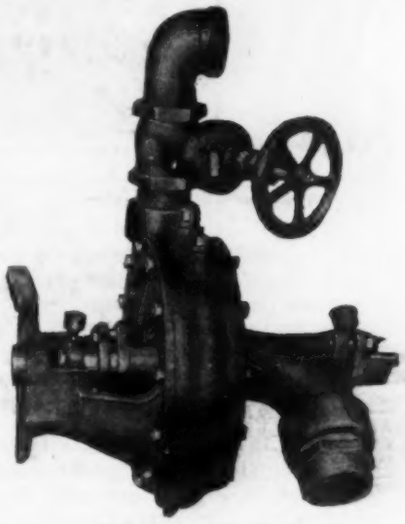
Barton Portable Pump For Quick Field Service

Adaptability of the Barton Portable Pump, made by the American Steam Pump Company, Battle Creek, Michigan, and being distributed by the Smith Separator Company, Tulsa, Oklahoma, to Ford cars and trucks, opens a big field of use for this pump in connection with the oil industry.

The pump is the centrifugal type of special design, minimum weight, yet strong enough to stand the strain of overload. The connection between the car and pump is simple, but of strong construction. As the weight of the pump is carried on the frame of the car, it may be left on while driving without strain or breakage to the car. The pump is driven by means of float-



Side view of Gardner Pump



Barton Portable Pump

ing shaft from the motor and is made in various sizes to suit the customer's requirements.

Capacities range from 50 to 550 gallons. A small hand clutch is used to disengage power units when driving.

On any job where drainage must be accomplished by mechanical means, the pump can do the job quickly at very little expense.

The first installation of pump and attachment on the car, truck or tractor requires about one and a half hours' labor, and thereafter the pump may be connected or disconnected in two minutes. As many power-take offs as are desired may be furnished.

Further information can be had from the main office of the Smith Separator Company, Tulsa, Oklahoma, or any branch office of this concern.

Portable Air Compressors Are Electric Driven

Two new Sullivan Portable Air Compressors have recently been put on the market by the Sullivan Machinery Company, 122 S. Michigan Avenue, Chicago. These compressors are electric driven and are called "WK-322," and WK-324."

The "WK-322" model is mounted on steel wheels. This unit may also be mounted on a trailer truck, on skids, or on a one-ton Ford truck. The other unit can also be mounted on skids or on a trailer truck when required.

Capacities of the machines are 103 and 206 cubic feet of air per minute.

These machines have the compressor mounted at one end of the cast steel truck frame, with the electric motor close to the other. The air receiver is suspended in a horizontal position outside of the canopy top supports, at the compressor end, and a tank for circulating water is mounted

above the air receiver. Water is circulated through the compressor jackets by a small centrifugal pump driven by a pulley, on the drive shaft between the motor and the compressor.

The rheostat and starting equipment are mounted on top of the motor casing.

The truck frame or body is a heavy and substantial one-piece steel casting.

The compressors are equipped with Protectomotor air filters, insuring a supply of clean air to the compressor intake.

The outfits are protected from the weather and from tampering by sheet steel sides which are removed while the machine is in operation. These sides are padlocked in place when the machine is idle.

Trailer mounting for both outfits consists of special axles with rubber tired steel wheels equipped with Timken roller bearings. The springs are attached direct to the steel compressor frame by cast steel hangers and suspension links. The front axle is of truss construction, clamped to the front springs, and provided with knuckle steering mechanism, similar to that used on automobiles.

Complete descriptions of both outfits can be had by requesting copies of catalog No. 83-D, from the company.

Numerous Bulletins on Oklahoma Geology

The Oklahoma Geological Survey has recently published the bulletins listed below. The law requires that these publications be sold, and the price of each, including mailing charge, is given.

Bulletin 4, Coal in Oklahoma. This bulletin covers the history, production, location, etc., of the coal beds of the state, and contains, besides numerous illustrations and maps of coal areas, a table of analysis of the various coals. Price 85 cents.

Bulletin 32, Geology of Southern Ouachita Mountains, Oklahoma. This bulletin deals with the stratigraphy, structure and physiography, history, geography, and economic geology of the region. Profusely illustrated with photographs, charts, and maps. Price, $1.10.

Bulletin 35, Index to the Stratigraphy of Oklahoma. First attempt to index all the stratigraphic formations of the State, showing nomenclator, type locality, character, thickness, occurrence, age, correlation, and citations in the literature of the 125 formations in the state. This report is supplemented with a list of characteristic fossils. Price 57 cents.

Bulletin 37, Geology of Texas County, Oklahoma. This report is divided into chapters which deal in some detail with the geography, physiography, stratigraphy, water and mineral resources, agriculture, and history of the region. One map. Price 57 cents.

Bulletin 38, Geology of Beaver County, Oklahoma. Like Bulletin 37, this report covers thoroughly the topography, geography, geology and stratigraphy of the county. Supplemented with chapters on the fossils, water and economic resources, agriculture, and history of the region. Price 57 cents.

Bulletin 39, Geology of Marshall County, Oklahoma. This report deals with the physiography, stratigraphy, structure, economic geology, agriculture, history, and paleontology of the region. Illustrated with photographs, charts, and one map. Price 57 cents.

Bulletin 40, Oil and Gas in Oklahoma, is being issued as separate chapters. The following have been printed, and the price of each is 30 cents, postpaid.

40-A. This report treats the location, geography, topography, stratigraphy, and regional and economic geology of each of the following counties in northwestern Oklahoma: Alfalfa, Woods, Harper, Major, Woodward and Ellis. Four charts and one map.

40-B. Subsurface stratigraphy of northeastern Oklahoma. Chapters on the pre-Chattanooga formations, including the Arbuckle limestone, Burgen sandstone, Tyner formation, Sylvan shale, etc. One map and one cross-section.

40-C. Oil and Gas in Creek County, Oklahoma. A treatise on the areal geology, stratigraphy, structure, relation of future development to structure and oil and gas development in this prolific oil producing region. Photographs, charts and maps.

40-D. Subsurface stratigraphy of western Oklahoma. Discussions of the various formations with special chapter on the structure of the region. Map and one chart.

40-E. Oil and Gas in Stephens County, Oklahoma. Topography, stratigraphy, structure, and production of this importnat oil producing county. Special chapters on the location, history, stratigraphy, structure, producing sands, future possibilities, etc., of the principal pools in the county.

40-F. Oil and Gas in Okmulgee, County, Oklahoma. This county has more oil wells than any other county in Oklahoma. The entire subject is discussed. Illustrated with types of producing structures and a map showing fields.

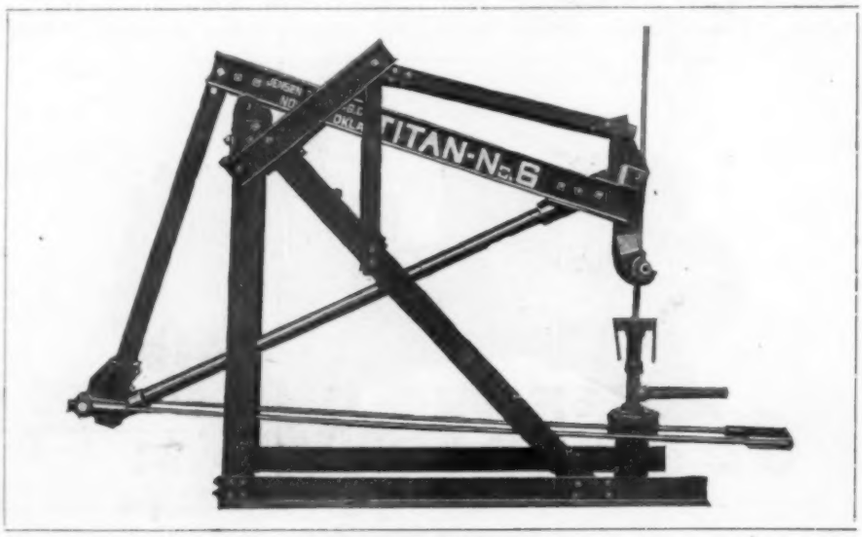
For bulletins address Oklahoma Geological Survey, Norman, Okla.

Jensen Markets New Titan Straight-Lift Jack

The new Titan straight-lift jack now being put on the market by Jensen Brothers Manufacturing Company of Nowata, Oklahoma, has been developed to meet a demand for a light weight jack that would stand up under a heavy, continuous strain.

The Titan jack weighs approximately 1700 pounds and has a working stroke of five feet. The straight-line motion of the jack is six and one-half feet and the same sturdy construction that has characterized other Jensen pumping equipment is built into this new model for which a good demand already has been established throughout the field.

With a straight-lift, under-pull motion, the Titan jack meets a new requirement in pumping equipment, according to the manufacturers who will be glad to supply further information on request.



New Titan Straight-lift Jack

DORECO

LOW PRESSURE GAS BURNER

TYPE H

THE NATIONAL SUPPLY COMPANIES

Say you saw it in The OIL WEEKLY.

LETTERS OF Paul Peebles P.S.G.

Dear Paul:

Sence yu aint written tu me eny more an are havin that prissy dingumfang to the writin I aint carin so terrible much about readin a letter that has bin talked into wun of them "dingunfonys" as yu call it. Why the only name I ever heard one of them gurls called by is a steno or seckytary and you needen think yu kin put enny thing buy me sayin sum long soundin word an callin that flapper it.

Now I no I aint never bin to Tulsy or Loz Awngulooz or even Huston mutch, but that aint no sine I dont no all about a ole buzzard a gallavantin roun in town. If it wussent for yu thinkin I wuz tryin to make yu jelus I'd tell you all about that yung mister Kidder who was hear last week sellin the new style bewty loshun an sed that I cood be the best lookin gurl in Galveston if I'd put it on.

Yours faithfully,

Cleo.

My Dear Cleopatra:

Cleo, honey, I was kinder afraid that you would misunderstand about me getting a girl to write my letters to you, but honey I told you all about how it works, and since I have told you all of the true facts about it, I do not see any reason why you should get your back up with me like that and go to talking about making me jealous about a perfume seller. And about him, honey, I would advise you that you had not better pay much attention to a fellow like him, on account of he told you a big lie right off about what that beauty lotion would do to you. He is either a big liar or blind or he never would have told you anything like that, and he was kidding you about putting anything on making you the prettiest girl at Galveston, because that aint the place where they put things on to make them pretty.

So I aint going to pay any attention to your raving because you have misunderstood, but will explain it all again to you when I see you, or if you will come up here I will show you how this machine works so that all the close I get to the girl when I am having her write for me is when she comes in the room to get the coupling with the phonograph record stuff on it. Of course she gets a whole lot of pleasure out of writing for me, because she hears my voice, but that is not any reason why you should get jealous of her. It is a lot of girls that like to hear my musical voice, but you are the only girl that means anything to me.

And speaking about voices reminds me to tell you something which happened to me a little while back so that you will understand how it is and not blame me for it in case that onnery Slim hears about it and misrepresents things to you about me like he always likes to do.

Where the voice part comes in was that I was trying to get a number on the automatic telephone and I guess I got mixed up on what hole I got my finger in or something, because I did not get the place I was looking for, and it was a pretty voice answered and I don't know all that was said except I found out it was a doctor's office and, instead of me being rough like and telling her I had got the wrong number, well I just made out like that was the place I was calling for and asked her where it was so I could come up and see the doctor.

Well she told me, only I guess I had not better tell you on account of you might want to go up there to see her about it if you misunderstand what I tell you. I did not really intend to go, but she talked so friendly like that I thought maybe she was lonesome or something, on account of I did not know then that she was married.

So any how I went up there where she said it was and the doctor had a sign up that said he was a phyo—well any how four out of five have it—and exodontia specialist. Well I thought I had better get examined for the exodontia on account of I thought I was one of the one out of five, but when I got inside I found out it was a dentist I had come to see, only of course it was really the girl. But since we was all there it was not nothing for me to do but go ahead and let him look at my teeth, and honey what he meant about exodontia is that he pulls teeth and I would have backed off only this here girl put a towel around my neck and patted my shoulder and looked at me so sympathetic that I decided if I did not go ahead and spend some money with the dentist she would not get paid this week, so I went ahead.

First off he started to geologizing around in my mouth and then he asked me if I ever read a Listerine ad and give me some stuff in a glass to wash out my mouth with. Then he started in again and found some outcrops he said needed drilling, so he rigged up his rotary and started in with a fish tail. It was alright while he was spudding, but pretty soon I seen he had made a mistake by not starting the pump, because she sure did get hot. Well I made the best protest I could with his hand in my mouth, so he changed location and started again. It would be too long a story to tell you all about that drilling he done, only I told him I was going to send some of my rock bit friends up to see him, because the formation was too hard for a fish tail.

But I found out later

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Try This Test

Send for a sample of Baroid. Mix with water. Do the same with some "mud from your slush pit." Let both mixtures stand. You will see that Baroid stays in suspension while the other materials settle out.

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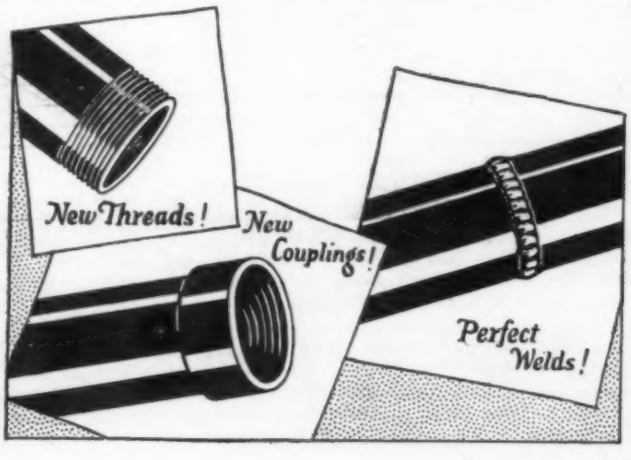
Saint Louis Tulsa, Okla. Fort Worth, Texas



THESE power heads are totally enclosed, self-lubricating, with gears operating immersed in a bath of oil, making a very quiet and smooth running power head.

The massive main frame serves as a compact housing and a rigid support for all the working parts. The main gear is driven through a pinion which actuates a crank shaft, which in turn actuates an all-steel walking beam which operates the crosshead. This power head may be slid back upon its base, which permits the removal of the rods and drop pipe without tearing down the installation or disturbing the pipe connections.

While illustration shows motor drive, these power heads can also be successfully operated with a gasoline engine.

They are made in both 18-in. and 24-in. stroke

These heads are more fully described in bulletins, furnished on request.

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The American Well Works

SQUEAKS FROM THE BULL WHEEL

Paul Peebles

(Continued from page 110.)

that the drilling was pretty easy compared to what was coming, because he put the exodonia to me later on. It sure was a man-size pull to get them three teeth out, but he said they had to come out or I would have ingrowing toenails or something worse, so I let him go as far as he liked.

I guess you know what kind of fishing tools a dentist uses, well he had to use them all on me because the formation was froze around the tooth so that when he pulled he would break it off and by the time he got through he was pulling the bottom of the tooth out of my neck.

Then after that I had to go up there every once in so often to get treated and some of the times he was gone and the girl had to doctor it which was pretty nice till I found out she was married. So honey you see what I got myself into by thinking I was being nice to a girl what was lonesome.

So if you think you have to be jealous abou ta girl writing my letters to you, well you can just think about this girl in the doctor's office and a whole lot more which there are a whole bunch of them in Houston, and if you ever get tired of me being true to you, well you see how it is. I can't help it if I am popular with the ladies because I guess you know the reason why. But all the same I am true to you always.

Your loving

Paul.

First Englishman: "Charlie, did you hear that joke about the Egyptian guide who showed some tourists two skulls of Cleopatra—one as a girl and one as a woman?"

Second Englishman: "No; let's hear it."

WELL - ARE WE GONNA GET STARTED TODAY ?
YEAH!
I'LL CALL UP ABOUT THAT DERRICK LUMBER
I THINK I'VE GOT A LITTLE IDEA THAT WILL SAVE SOME TIME
SAY BROTHER-YOU AINT TELLIN' ME HOW TO BUILD A DERRICK-ARE YOU?
CAN'T YOU DO' WEEVILS LEARN NOTHIN' NEW ?
WELL - IF THIS IS A DERRICK I'M THE QUEEN OF THE MAY
THAT'S THE WAY
LET'S QUIT BEFORE HE HAS US DOING A BICYCLE ACT
IT WORKS!
CLOSE UP

Son: "What's a genius, pop?"

Pop: "A genius is a man who can rewrite a traveling salesman's joke and get it accepted by the Ladies' Home Journal."

Can't Be Done

"Dey ain' no jestice no mo'," mourned Rufus to a friend. "Sam, ah's a sick man. Guess ah's gwine die, suah. Ah goes to de doctah, an' he says mah veins am too close. Says I got very close veins an' de oney help fo' me, he says, am to eat chicken brof free times a day, an' stay in nights. An' Sam, dat jes' kaint be done!"

Wise Guy: "Here, sonny, is a quarter. Does any other fellow besides me call to see your sister?"

Sonny: "I don't think he really calls to see her 'cause they never have any light in the parlor when he's there."

Daisy: "If you men told the truth, you would have to admit that you like talkative women as well as you do the others."

Tom: "What others?"

Dismissed

Judge: "I can't understand a big, husky man like you beating a poor frail little woman like your wife!"

"But she keeps nagging and taunting me until I lose my temper."

"What does she say?"

"She yells, 'Hit me! I dare you! Go ahead! Just hit me once and I'll have you dragged up before that bald-headed old fossil of a judge!' "

"Case dismissed."—Pacific Gasoline Booster.

Only a Machine

"Why do you rise so early in the morning?"

"I have to get downtown early in order to find a parking place for my car."

"But do you not then have a good deal of time hanging on your hands?"

"Oh, then I take the street car home and have breakfast."—Philadelphia Inquirer.

"Well, my boy, do you know what 'syntax' means?" asked the teacher.

"Yes, sir; the duty upon liquor."

Mature or Expire?

"Listen heah, boy, jes' what kind of a life is you been livin'?"

"Oh, ordinary, jes' ordinary."

"Well, if you' pulls any mo' aces out o' yo' shoe, yo' ordinary life is goin' to mature."

"That was a foine sintiment Casey got off at the banquet last night."

"What was it?"

"He said that the swatest mimories in loife are the ricolliction of things forgotten."

Oh, Hum Another Dodo

Not satisfied with a mere nook in the Hall of Fame, E. R. Erb, of the Union Oil Company of California's comptroller's office, has bid for a place among the ranks of the "Immortals" by making a second hole-in-one within thirty days of his first memorable feat.

When it is realized that a hole-in-one is considerably more difficult to achieve than drawing four aces to an ace in the hole, Mr. Erbe's claim to the pinnacle of golf perfection seems justified. The pair of phenomena occurred on the links of the Sunset Canyon Country Club, California.

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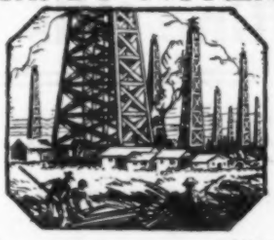

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And why not? What other kind of service would you expect from a coupling that is Forged Seamless from Special Oil Field Steel without a weld or a weakness?

UNUSUAL service is made possible by the double strength of Harrisburg Couplings and insured by accurate threads, perfect taper, and a uniformity of size and temper that eliminates all question of stripping or galling.

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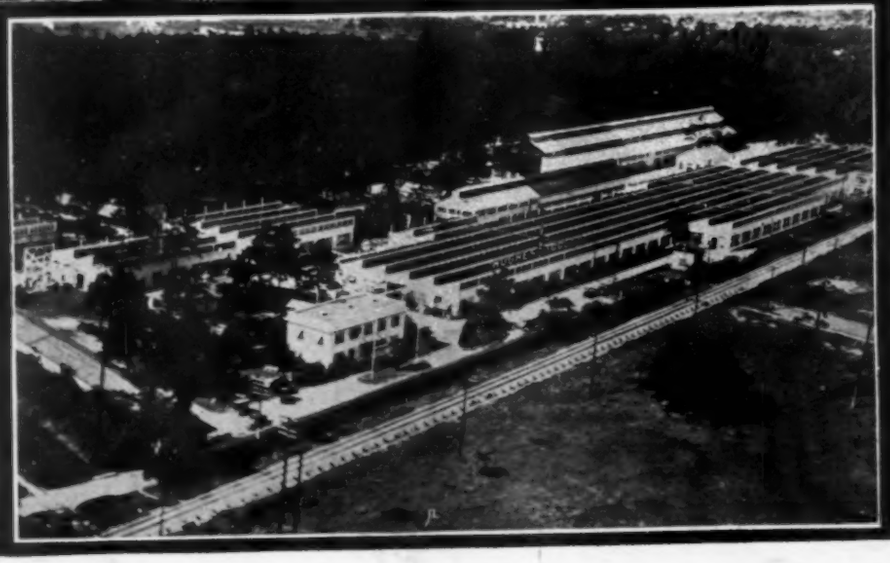
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